SUPPLEMENT.

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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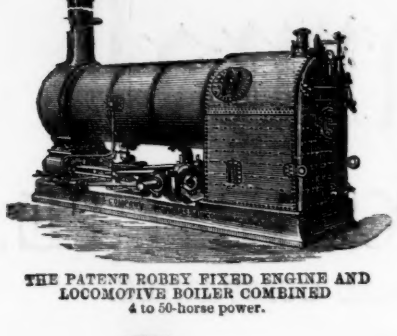

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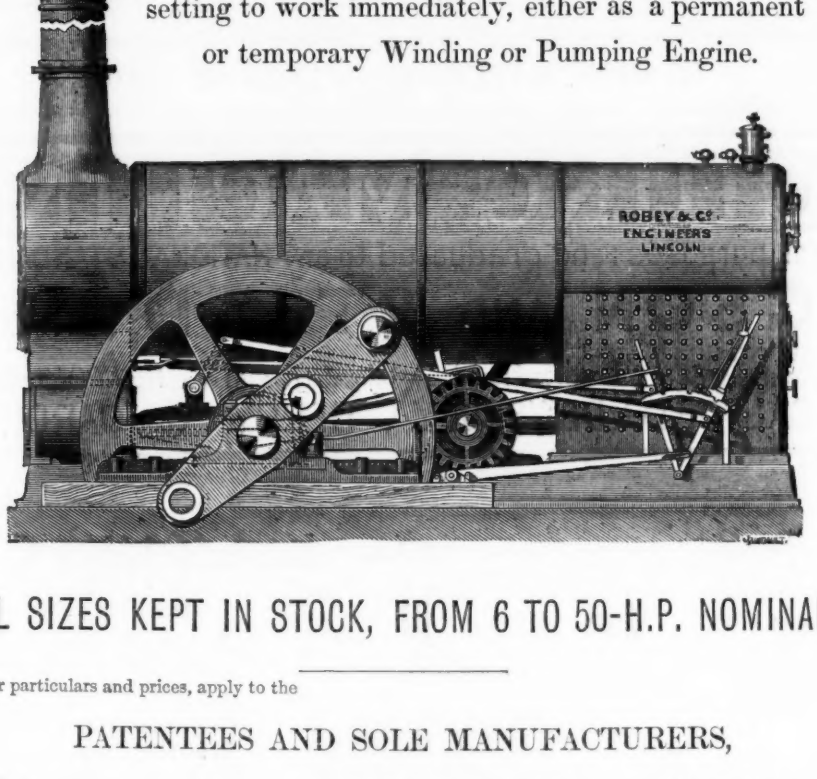

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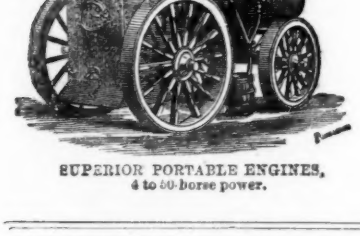

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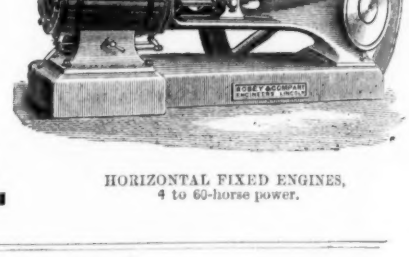

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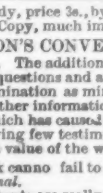

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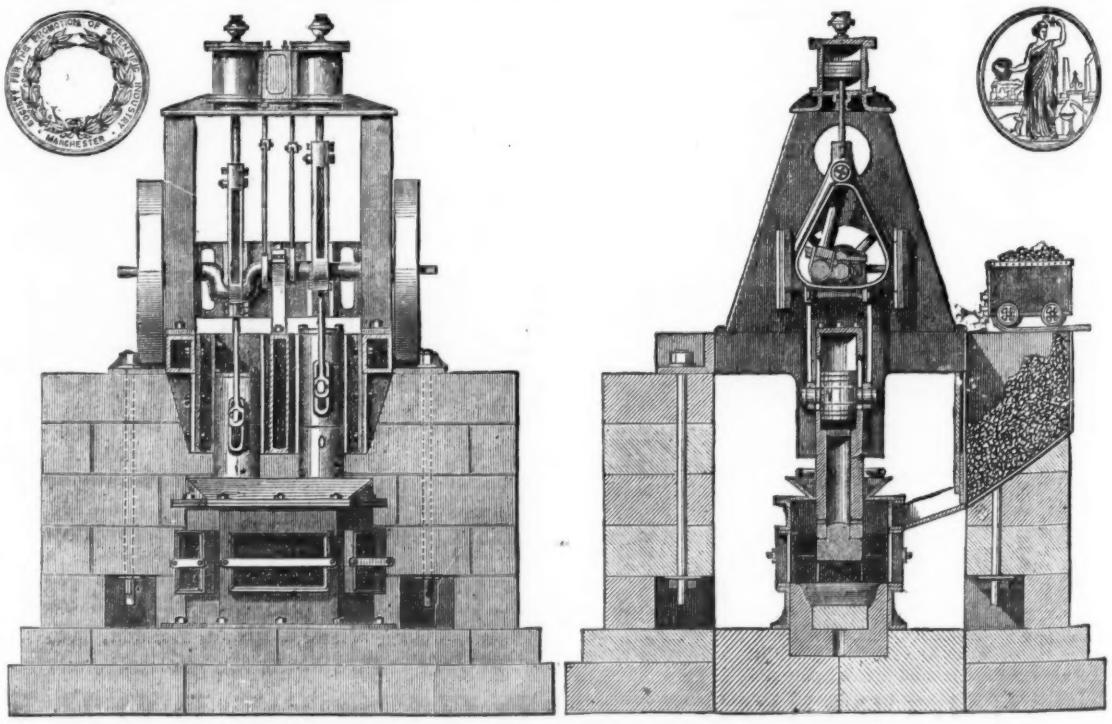

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THE ROYAL COMMISSION ON ACCIDENTS IN MINES.

SIR,—I notice in the Journal of Saturday that a Royal Commission has been appointed, and that they are now taking evidence. I think if they would turn over the papers on this subject sent in 1872 to Mr. E. Hermon, they would not require much besides. I am satisfied that they contain a mass of evidence which, if it had been carefully weighed over and considered, and where necessary adopted, we should have had less of these so-called accidents to deplore. Take, for instance, my own little paper. I criticised the whole matter in every part and detail, showing many defects, and pointing out what I thought better and safer; for instance, I condemned furnaces for ventilation, and stated there they were defective, and in some cases dangerous in themselves. I suggested that Geordie or Davy lamps should be used in fiery mines, and contrasted their safety with the others, and also the various fastenings; and blasting by gunpowder in mines of this class I condemned altogether in any part, as being more likely to cause an explosion than anything else, and showed that to be safe, like the links of a chain the method must be continuous and perfect and the weakest link the strength of the whole. I suggested that the setting of the timber and the spragging should in every case be done by the deputies, and not by the colliers, and stated my reasons for such a course; the manager, I laid down, was to visit the pit every working day. These are a few things mentioned. Now take Lycett, what do we find? Blasting in a fiery mine, condemned years ago, no attention paid to it; why? I suppose a question of cost of production *versus* risk of valuable lives. Again, the manager does not appear to have visited the pit for about ten days—another flaw. EDWD. BURGESS.

Southampton, March 1.

WEST OF ENGLAND GUNPOWDER COMPANY.

SIR,—With reference to the paragraph which appeared under this heading in last week's Journal, and in which it is said that the managing partner of the proposed new company was until recently the managing partner of the Kennall Vale Mills, we beg to inform you that no such person having any recent connection with this company is in any way concerned with the West of England Gunpowder Company. Mr. W. H. Lanyon, to whom no doubt the paragraph is intended to refer, was at one time the manager of, and had a small interest in, this business, but he has had no connection whatever with our company for the last 12 years. We shall be obliged by your inserting this letter in your next issue.

KENNALL GUNPOWDER COMPANY.

Kennall Vale, Penryn, March 3.

PUMPING ENGINES.

SIR,—Reference has been made in former communications to the use of compressed air as a motive power for driving pumping-engines placed in the dip workings of mines, and to the convenience of its application for this purpose where compressed air plant has already been established, but compressed air as yet is used only to a limited extent. This system is only adapted to pumping water from the workings to the bottom of the shaft, or a part of the distance; or it may be applied in forcing water up the shaft to a limited height. The pumping of water from the bottom to the top of pits has been, from the time of the introduction of steam-engines to within a recent period, always effected by an engine placed at the top of the pit, as with the atmospheric engine, the Boulton and Watt double-acting engine, the Cornish engine, and the more modern Bull engine; but the latter types have been to a great extent superseded by steam-engines placed at the bottom of the pit, the steam in most cases being taken down the pit from the boilers at the surface. The water is forced up the pit in one main pipe, thus dispensing altogether with the use of pump-rods, and saving power by avoidance of friction and the wear and tear the working of them entails.

Engines of this class, of large size, have been made by various firms in this country, Routledge and Ommaney, Tangye Brothers, of Birmingham, being the makers of some of the first of these engines. The firm of Hathorn, Davey, and Co., of Leeds, have given great attention to the draining of mines. The compound differential pumping engine, as made by them, is now extensively used in this country, varying in size from 5 to 500-horse power. The *Mining Journal* of Oct. 30, 1875, describes the compound pumping-engine of Mr. Davey as an invention of great value, especially in the mode in which it adapts itself to changed conditions of the pitwork, saving it from the heavy shocks and breakages arising from taking air. The leading principle of economy in the use of steam is expansion. This principle was fully recognised in the working of Cornish engines many years ago, a greater degree of expansion being used formerly than at present, accompanied with higher initial pressure, but this was found to be too great a strain on the pitwork, and to occasion breakages. The lower steam pressure now used may account for the reduced duty of Cornish engines as compared with former periods.

The engine that will work with the greatest amount of expansion is said to be the most economical. The resistance to be overcome in pumping is usually constant; the force applied to the overcoming that resistance varies, the mean of the two forces coincide, but the extremes vary greatly. The steam pressure is too great at the commencement of the stroke, and too little at the end. The work may be stored up while the piston is performing the first part of the stroke, and given out again while it is making the latter part of the stroke. This function is performed in the rotating engine by the fly-wheel, and in the Cornish engine by the momentum of the pit-work, beam, and water column. To carry out this principle in the Cornish engine the piston speed at the commencement of the stroke must be very great, and enormous strain is put on the engines and pitwork above what is required to overcome the resistance of working the pumps. These objections are surmounted by the compound differential pumping-engine. A diagram of one of these engines shows the variation in force between the commencement and end of the stroke to be as 2½ to 1, whereas in the single cylinder or Cornish engine the diagram shows the variation as 6·3 to 1. The compound engine may thus be made lighter in construction; there is more security from breakages, and the speed of the engine is more uniform. With the direct-acting Cornish engine there is a danger of breaking the cylinder covers, from loss of the load, arising either from breakage in the pitwork or shortness of water. The differential valve-gear affords a safeguard against such occurrences. The travel of the slide is effected in an auxiliary cylinder, regulated by a water cataract. The speed of the engine is regulated by the valve-gear, and should the engine tend to run away the difference in speed of the two motions effects the immediate closing of the steam-valve.

The differential pumping-engine erected at the Croydon Waterworks consists of high-pressure cylinder 30-in. diameter, low-pressure cylinder 60-in., 7 ft. stroke, working a double-acting piston-pump, 27-in. diameter, 7-ft. stroke. This engine is required to raise 3½ million gallons of water 200 ft. high in 23 hours.

The pumping-engine, on Mr. Davey's principle, erected at the top of the pit, South Durham Colliery, is 500-horse power. The high-pressure cylinder is 45 in.; the low-pressure cylinder 72-in. in diameter, 10-ft. stroke. A separate condenser is connected to it. The engine works two plungers—each 20-in. diameter, by 10-ft. stroke, forcing the water 668 ft. high in one lift and main, by means of two quadrants at the top of the pit and two wooden spears or rods, one from each quadrant to its corresponding 20-in. plunger. In full work the quantity of water raised is about 2000 gallons per minute.

Their system of underground pumping has been extensively put in practice. It is carried out in a colliery 200 fms. in depth. At a point in the side of the pit 900 ft. from the surface a pair of compound differential engines with pumps and separate condenser are placed. The engines have cylinders for high and low pressure of 35 in. and 60 in. diameter, by 6 ft. stroke. The pump rams are of gun-metal 12½ in. diameter. At the bottom of the pit, 300 ft. lower than the main engines, a pair of hydraulic pumping engines are placed; these are to lift 1000 gallons per minute to the main engines. The main engines force the water to the surface; the power for the hydraulic engines is supplied from the base of the column. By this arrangement the main engines are not in danger of being flooded. The hydraulic engines will work under water, and could be actuated from the main engine room if required. But these engines may be placed in a water-tight chamber, access to them being through an independent staple.

Hydraulic engines may be placed also in the distant dip workings of a mine, and worked on the same principle—that is, the pressure from the column in the pit operates in raising a much larger quantity than is expended on the engine, but to a less elevation. These hydraulic engines have been erected varying from 2½ in. cylinder, 2½ in. pump, by 6 in. stroke, up to one 15 in. cylinder, 9 in. pump by 5 ft. stroke; the duty of the latter is 200 gallons per minute raised 355 ft. by 180 ft. pressure. A hydraulic engine erected at Erin Colliery in Germany has two 7-in. cylinders, 12-in. pumps, by 5-ft. stroke, and will raise 500 gallons per minute 250 ft. high under a pressure of 910 ft. M. E.

GOLD IN INDIA.

SIR,—At a moment when public attention is being directed to the gold fields of South Wynaad, and influential companies have been and are being formed with large capitals to work those auriferous deposits, it may not be uninteresting to learn that so far back as about the years 1832 and 1833 the then Governor of Madras, Sir Stephen Rumbold Lushington, appointed a commission of officers, presided over by (I think) Col. Dumaresque, of the Madras Engineers, to examine the locality, and report generally to Government on the condition and value of these mines. I recollect from conversations I had with several members of that commission that they ascertained that during the tenure of the supreme power usurped by Hydu Oli, and subsequently by his son, Tippo Sultan, over the kingdom of Mysore, the quartz deposits in the Wynaad were worked by forced labour for the benefit of their treasury. The locality in which the works were carried out was at certain periods of the year subject to a most deadly fever, from which vast numbers of the pressed workmen perished. After the fall of Tippoo all public operations ceased, and the works remained untouched to the present day. A class of people, however, found a precarious living by collecting minute particles of the gold washed down by the mountain streams. The dust was held in high estimation by the native goldsmiths for the manufacture of ornamenis so universally used amongst the well-to-do classes in India. I have frequently when stationed in that part of the country had brought to me small quantities of this river gold, in particles not larger than very small shot. I have reason to think that further auriferous quartz may be found on the western flank of the Koondah range of the Neilgherries, as in my excursions in that quarter I have observed that seams of peculiarly white quartz cropped out from the scarped wall of that grand range of hills which there rise some thousand feet abruptly from the plain.

It is, therefore, not impossible that a great future may yet await this lovely portion of the Madras Presidency; but it must not be forgotten that the base of the hills where these gold fields exist is girt with a girdle of malarious fever, which at certain seasons of the year may seriously interfere with mining operations, especially with Europeans; but it is to be hoped that the clearing of the jungle of late years for coffee culture may, to some extent, have removed that objection to massing large bodies of workmen at the mines.

March 3. A MADRAS OFFICIAL.

GOLD MINING IN INDIA—WYNAAD AND CALIFORNIA.

SIR,—In examining the prospectuses of the India gold companies which are being, and which are said to have been, successfully floated on the London market of late, I am struck with the extreme credulity with which investors part with their money when the scene of operations is laid in countries in which England has a permanent footing. It is that feature certainly, more than any rational prospect of a mining success, if what one reads in the prospectuses and reports of the parties interested are the only facts upon which to base the hope of realisation. Certainly, such vague and indefinite representations regarding mines in California, Australia, or any other countries which have produced their millions of the precious metals would not only fall stillborn, but would be ridiculed by every man who has the least experience of the uncertainty of success attending the outlay on entirely unexplored outcrops. If I am not mistaken, many unsuspecting investors will have occasion to rue the day of their lavish investments in the new Indian gold fields.

California produced during 1879 over $17,000,000 in gold, and the product of the precious metals on the Pacific Coast of America since 1848 has been $2,138,061,186. Will any one say how many grains of gold have been dug from the mines of India since it has been under British rule?—*London, Feb.* 27. MINER.

DON PEDRO NORTH DEL REY MINE.

SIR,—It may be worth while enquiring whether the terms of the letter of your correspondent "Veritas," limited as they are to the bare assertion and persuasive appeal he confines himself to, are really well adapted to promote the object he professedly aims at. The reliability of his special information would have been more manifestly conclusive had the attained results in the shape of actual produce borne out his specific assertion, but while these are very gratifying as contrasted with a long period immediately preceding, they are certainly not upon a scale commensurate with his description. Any shareholder who has but taken the initial care of perusing Mr. Dawson's recent correspondence, as posted up for some weeks past in the company's office (or read it as to some extent published in the Journal), will not complain that Mr. Dawson's details have been meagre, or that he has hesitated to enter into and grapple with the main questions of pressing interest and importance, and will know that the base on which "Veritas" gives his opinion by no means presents to view a full consideration of existing vital points affecting the future of the working of the mine. Advise fellow-shareholders how to act if you will, but in doing so deal with all existing available information bearing upon the prospects of their property, whereby alone the advice will obtain a value it fails to be entitled to while founded only upon an abstract and isolated item of detail.

INVESTIGATOR.

THE CEDAR CREEK GOLD MINES COMPANY.

SIR,—I was pleased to hear the other day of the suggestion made for re-working the valuable property of this company. I trust the shareholders will pull together, and carry out some well-considered plan for resuming operations on the mines in California. There could not be a better time than the present for calling the shareholders together and taking their opinion. The Chicago Silver Mining Company are pulling through the difficulties which swamped them for two years, and the Cedar Creek people ought to take a lesson out of their book, and go in for reconstruction.

March 3. A SHAREHOLDER.

IRON ORE FROM SWEDISH LAPLAND.

SIR,—With respectful reference to my correspondence in the Journal of Aug. 16, 23, and 30, Sept. 6, 13, and 27, Oct. 4, 11, 18, and 25, Nov. 1 and 15, 1879, and Jan. 10, 17, and 31, 1880, on the Supply of Steel from Swedish Lapland, and of Iron Ore and Steel from the Bilbao District, permit me to state, that quite independent of my gravitation system the principle of the (elevated) long worked incline coal-wagon way, presenting no novelty, is perfectly applicable for the cheap transport of Lapland iron ore and timber. With a series of inclines and elevating appliances—as both existing in the railway daily coal traffic in use in England—iron ore can be delivered even thus cheaper in England, Germany, Belgium, and France from Lapland than the actual cost from the Bilbao iron mines and excavations, and of a much superior yield. The Swedish Government, as I have previously stated they would do, have refused to entertain the extraordinary demand of 13,375,000 kronor value in timber unblushingly alleged to have for its object the conveyance of the New Gellivare Company's iron ore to the Gulf of Bothnia by a surface railway in the land of snow. Immense deposits of the richest magnetic iron ore are waiting for exploitation in Swedish Lapland, by royalty or otherwise, without impinging on their property, involving an immense capital sunk by that unfortunate company beyond recovery by pursuing the past system of administration. The proposed undertaking is based upon the material support of the Swedish Government, and which, I deferentially submit, is deserving the serious consideration of capitalists and their active co-operation as a safe and highly lucrative investment. WM. J. THOMPSON.

Little Tower-street, March 2.

MISSISSIPPI AND OHIO RAILROAD COMPANY $6,000,000, OR £1,200,000, SEVEN PER CENT. FIRST MORTGAGE BONDS.

SIR,—The Seven per Cent. First Mortgage Bonds would appear to be worth attention, the price being 91 to 93. The net earnings of this company for the six months ending Dec. 31, 1879, after charging renewals and further construction out of revenue, amounted to 97,560*l.*; of this sum the Divisional Bonds would absorb 36,600*l.*, leaving about 61,000*l.* over as the half-year's net revenue for the Seven per Cent. First Mortgage Bonds, which require 42,000*l.* The most satisfactory way of reckoning is that the sum expended on steel rails, &c., between June 13, 1876, to June 30, 1879, was 149,928*l.*; this was all taken from revenue account. The main line has been laid with about 195 miles of steel rails, or nearly one-half of the total length. The operating expenses, exclusive of renewals, were 52¾ per cent., and including renewals 63½ per cent. of the gross earnings. The present price would seem to admit of a considerable rise—say, to 135 per cent., including the 35*l.* coupons to be funded or paid. Finally, by way of comparison, it may be observed that the Erie Second Mortgage, including the accrued interest, is selling at about 123.

March 4. B. E.

A NEW SLIME-DRESSER.

SIR,—A new patent slime-dresser, the invention of Mr. W. Nance, of North Shields, has lately been tried at Grogwinion Mine, near Aberystwith, and the results are considered very favourable. The quality of the ore being operated upon is a mixture of fine slimes and sand, consisting of about 65 per cent. slime and 30 per cent. of sand, and only 5 per cent. of galena. The machine has been designed with a view of treating fine slimes only, and the result from the treatment of such inferior quality of stuff as we have described is considered by competent dressers as most satisfactory, and much superior to anything attained by any other machine now in use. The whole of the 65 per cent. of slime is precipitated automatically into the tail race, and three distinct classes or qualities of ore are obtained in troughs provided for the purpose. These three qualities are of different fineness and of different qualities. With such low percentage ore it is difficult to prevent some of the rough sand to enter the first compartment, the particles being equal in weight with pure ore of a smaller bulk, but it is expected that with a better and more uniform quality of slimes the first compartment would contain ore so clean as to require but little if any further manipulation.

The present arrangements being only temporary, there are, as a matter of course, many little details which are not so perfect as they are intended to be when this machine is fixed in a permanent form; but there can be but little doubt that this machine is destined to supercede the present cumbersome and dilatory system of trunks, round buddles, dolly tubs, &c. The machine is purely automatical, and is adapted to receive the fine ores direct from stamps, crushers, jiggers, or any system of classification, and by a direct treatment effected within the compass of a few square feet the stuff in a few minutes is discharged, separated, and classified so as to enable the dresser to ascertain with little trouble day by day the net produce of each day's work, whereas by the system now generally in use the slime ores are first of all distributed through an endless variety of trunks, buddles, slime pits, &c., and then has to be collected together and treated and re-treated without end. In the treatment of the more precious ores, such for instance as contain tin, nickel, cobalt, and especially silver and gold, the process might have to be extended to two or three series of machines, as might be required, all working automatically from one to the other.

This machine is also well adapted for refining china-clay from the impurities generally connected with it.

The inventor claims for his patent slime-dresser the advantage of saving 90 per cent. in labour, and also the saving of a very large percentage of fine slime ores, which are completely lost day by day at most mines by the present system. The German principle of treating the crop ore after crushing by means of jiggers has been in use in a variety of forms in this district for many years; but, strange to say, scarcely anyone took any trouble to improve the wasteful and laborious system of slime-dressing until Mr. Nance introduced his machine. This neglect of slime-dressing is the more remarkable as it is well known the largest percentage of silver, in the case of silver-lead ores, is always found in the slimes.

The double self-acting jigger now at work at Grogwinion and other mines under the management of Capt. John Kitto is, perhaps, the most perfect and most efficient and also the most economical in all respects now in use, and Mr. Nauce considers that his machine, acting in conjunction with one or more of these improved jiggers, will constitute the most complete, compact, and efficient mineral dressing-floors. As far as the results obtained under very imperfect arrangement will enable us to judge we think that Mr. Nance is not too sanguine as to the success of his machine, and we hope he will receive that support from mining proprietors and managers which his great outlay and perseverance in the matter deserve.

MINING AGENT.

ROCK-BORING MACHINERY

SIR,—It may not be uninteresting to your readers, more especially those of the mining community, to hear that two of the great rival rock drills of the day have recently had a competitive trial in real earnest upon the Milford Haven Dock works, now being carried out by the well known firm of contractors Messrs. S. Lake and Co. The drills in question were a 2½ in. Eclipse and a 3 in. Schram; the latter was handled by the proprietor's own man, while the former was worked by one of the contractor's labourers. The Schram seems to have broken down twice during the trial, but the Eclpse, which had been at work some time previous to the trial, is still doing its work in good order. During the trial no advantage was taken of the break-down by the other drill, but a strict record was kept of the time, and at the second break-down of the Schram the amount of work done by each drill was carefully measured and found to be—

Schram, 9 feet 11 inches.
Eclipse, 19 feet 6 inches.

The difference is very great, and the statements of the purchasers of the Eclipse drill seem to be fully borne out. This is another instance of the superiority of the automatic feeding arrangement over the hand feed. The valve arrangement of the Eclipse seems to me to be the best yet invented. To my mind the drill of the future is the Eclipse, and it is well worthy the attention of the mineowners and others requiring rock drills for their works. ROGER D. JONES.

St. Clears, March 2.

ORE DRESSING.

SIR,—Of late years great improvements have taken place in this department, and it is not surprising, considering their great importance, that we look back now with some degree of contempt on the expensive and ineffective apparatus in general use a few years since, and naturally with a greater degree of the same kind of feeling on those still in use, and the reluctance with which one mining company after the other avail themselves of these improvements, whilst a large number still adhere to the old system of hand dressing, either through prejudice or financial constraint. These great improvements were based on a more perfect and more minute classification of the ore which, combined with the improved continuous jiggers, enables the rough ore to be kept in motion automatically until it is entirely separated from the waste, leaving the slime ore, however, to be treated as formerly; but some experiments have lately been made with a new apparatus, with a view of keeping it also in motion until the same satisfactory result is obtained as with the rough ore, being based upon and having for a starting point a better and more minute classification, and I am pleased to say although these experiments were carried out on a small scale the results were highly satisfactory, classifying three distinct classes of ore, and throwing off the fine waste or marl into the tailrace, rendering the water much less thick and buoyant, and at the same time concentrating the ore into a small

bulk, and fully exemplifying the means of keeping the whole in motion as desired, and at the same time economising a great waste of fine ore occasioned by treating the fine and rough ore together. For instance, if we mix the rough and fine ore together sufficient force of water must be brought to bear to wash away the rough waste, which would inevitably wash away the fine ore with it; and, consequently, we find in the tail of all buddles a considerable quantity of fine ore, which rebuddling will not separate from the rough waste, it having washed together once will continue to do so however often it may be washed over again, and the only means of preventing this loss of fine ore is by separating it from the rough, and treating it separately, or classifying it as above described.

The loss of fine ore becomes very important in the treatment of rich silver-lead ore, the slimes of which invariably retain the largest portion of the silver contained in thy ore, and also equally important in the treatment of auriferous matter, which is generally found most abundant in the fine dirt, as well as in the treatment of tin and the various kinds of ore. It will also be found very efficient in refining china clay and earths for potteries, &c.

This mode of dressing is continuous and automatic, delivering with the aid of a vanning machine the whole of the waste into the tail-race, and rendering the ore quite clean without the aid or expense of the dolly-tub, thus economising the enormous labour attached to buddling, &c. W. NANCE.

Stanley-street, North Shields, March 3

NANT RHYS SYNDICATE

SIR,—I have the pleasure to chronicle a fresh mining enterprise in this neighbourhood, the sett adjoining the old Cwmystwith, and known as the Nant Rhys, is at last to be developed. A company under the above title has been formed to prove the property, and work has been commenced under the direction of Capt. Michell (it seems like old times to have him amongst us again) on two of the lodes—the copper and the south lodes, and the indications are most favourable, and it would not surprise me to hear at any time that a body of ore has been cut; in fact, I predict it will not be long before they do so. Why this extensive sett, with its known lodes, and in close proximity to so many valuable mines, has been neglected has often puzzled me, and I am pleased to see that there are some parties left who will go in for proving and developing properties. I wish the Nant Rhys Syndicate every success, of which I think there is no doubt.—*Aberystwith, March* 3. R. P. S.

TIN AND LEAD.

SIR,—The interesting and considerable correspondence appearing in the *Mining Journal* is so much like old times that, with your permission, I will show that we are, in truth, in old times again. Who cared this time last year to read anything connected with mining property; now everybody wants to write about it. Why? We all feel that a change has taken place which personally concerns us equally as adventurers, and dealers, and investors. We all feel that a period of activity and profit has been entered on which should not be suffered to pass by without money being made out of it. Nothing more could be said of the best of old times, and, therefore, we have that blissful state of things back again. But some one will say that prices have given way. So they have slightly from the highest points, but take the case of tin and what is its outlook? The brokers say that the tin market is likely to advance, and that the advance will be maintained. It will be a permanent advance, there can be no doubt of it.

Our Australian friends who tried our tin market would, if the whole truth were told, be found to have done but poorly. Wages are high in Australia, here they are miserably low. Other things being equal who could offer the cheapest tin? Circumstances here turned attention in Australia for the moment to its least profitable occupation. We had got tired of Australian tinned mutton, and had become patrons of the more palatable Chicago corned beef. We were offering next to nothing for Australian wool, and we were indifferent to Australian wheat. What were our friends to do? They tried tin. It did not answer. We now want Australian wheat for mixing with the poor stuff of our own last season's growth. We now want Australian wool, because Leeds, Bradford, and Huddersfield are again busy. Under these circumstances the attention of our Australian friends passes from tin to wheat and wool. They know what they are about when they handle these, just as they know what is to be the outcome from the washings of their gold mines. Gold is always worth 3*l*. 17s. 9d. at the Bank of England. Tin was found by bitter experience to be worth less than the expense of getting it. Thus, with the disappearance of our Australian friends from the English tin market the brokers will not be far out in their anticipations. With improving trade the price of tin will advance. So will the price of lead and other metals. That there will be ups and downs in prices all classes, I trust, look forward to. The investor buying to-day hopes to sell again at a better price, and selling to-day he hopes to buy again at a lower price. This is the spirit and end of trade, and any reactionary argument founded on it is good for nothing.

Having said this much to encourage your correspondents on tin and lead, permit me to direct attention for a moment to properties in both metals of much promise, to which indirectly considerable prominence has been given by others in your columns. I refer particularly to Wheal Kitty and to West Kitty. A great deal has been written about the latter mine, and I think quite deservedly. West Kitty is in the good neighbourhood of Wheal Coit, Trevaunance, Wheal Friendly, and Polbreen, and the Wheal Kitty lode traverses the sett of West Kitty at a moderate depth in a stratum which is congenial for tin, and can be easily worked." I make the quotation from your impression of Feb. 7, 1880. Now the lode of Wheal Kitty was not particularly intended for West Kitty. There is an unnoticed mine, named Wheal Coates, that has the Wheal Kitty lode running through the length of the sett. It should, therefore, be as favourably regarded as West Kitty. As matters stand it is the cheapest and most promising tin investment in the market. A recent report of Mr. W. H. Martin sets forth that Wheal Coates lies "on the west slope of the Beacon Hill, in the parish of St. Agnes, and embraces all the rich east and west lodes of Polberro Consols, Wheal Trevaunance, Penhalls, and Wheal Kitty." Operations were suspended in February, 1879, when tin was 26*l*. per ton cheaper than at present. The property then passed into the hands of a liquidator, after an expenditure, first, of 20,000*l*. in sinking the engine-shaft, driving the levels, and in erecting plant and buildings; and, secondly, 13,546*l*. 6s. 8d., the proceeds of upwards of 289 tons of tin ore. It now becomes available for the capital sum of 12,000*l*. in 1*l*. shares, leaving 6000*l*. for working capital. These shares are on the market, with 10s. paid, for the moderate sum of 25s. Under spirited management, with additional and improved machinery, a more *bona fide* investment could not be placed before the public.

With regard to lead, one of your correspondents points out that with improvement in trade there will be an increased use of lead in paints. To this statement I would add the matter of fact of the granting of recent patents for the use of litharge with glycerine in new cements. These cements are fire-proof and acid proof, and are also generally applicable to moulding purposes. One of the anticipated leading uses of these cements will be inside or hold coatings for iron ships, common stone cement being in present use. This is a prospective demand of large proportions and entirely new. Together with the ordinary demand for lead in its various forms it points to an early and large improvement in the market values of neglected lead properties. I will only name two mines, both of which were reported on in your last impression—Frongoch and Ystwith. The managers report of the former is most encouraging—sales of ore for the month realising more than 2000*l*.; a greater yield of lead and blende than at any time since possession was taken of the mine, and new discoveries in the 24 and 56 fm. levels, and other portions of the mine. He adds that the yield of blende from these levels alone will pay all the working expenses of the mine, and leave the abundant supply of lead ore available for profit. Upon inquiry I find that the profit for the month of February was at the rate of nearly 60 per cent. per annum on the whole capital of the company. These are facts that no investor should pass by unheeded. Frongoch shares at current prices cannot be taken up too freely. Ystwith is also reported on favourably. If your readers will turn to what the manager says in last week's Journal there will be no mistaking the eventual outcome. I should recommend these shares for a large rise in price. The property is an excellent one, and it is in good careful hands.

9, *Gracechurch-street, London.* GEORGE BUDGE.

TIN AND COPPER MINES.

SIR,—The following table—showing the enormous advance in value of 24 of the chief tin and copper mines during the past six months ending Jan. 31, 1880—may prove interesting at the present time. In calculating the increase in market value the highest (or buying) price has been taken. The quotations are copied from the *Mining Journal* at the dates mentioned:—

Mines (24).	Quoted prices. 1879. Aug. 1. £.	1879. Dec. 31. £.	1880. Jan. 31. £.	Increase in market value. £.
Carn Brea	21 23 ...	67½ 72½	...102 105...	82,000
Cook's Kitchen	1½ 1¾ ...	3 3½	... 9½ 10 ...	20,213
Dolcoath	24 26 ...	55 60	... 72 74 ...	206,208
East Pool	9¾ 10¼...	22½ 23	... 36 38 ...	177,600
South Condurrow	.....11½ 12 ...	12½ 13½	...13½ 14½...	15,307
South Wheal Frances...	6½ 7 ...	10½ 11	... 17 18 ...	49,500
Tincroft	8 9 ...	16½ 17½	... 27 29 ...	120,000
West Basset	3½ 4 ...	12 12½	... 19 20 ...	96,000
West Wheal Frances ...	5½ 6 ...	16 17	... 23 25 ...	38,912
Wheal Agar	3½ 3¾ ...	6½ 6¾	... 7 7½ ...	22,500
Wheal Grenville	3¾ 4 ...	4½ 5	...10½ 10¾...	34,958
Wheal Kitty	¼ ½ ...	2 2½	... 7 7½ ...	30,055
Wheal Peevor	9 9½ ...	21½ 22½	... 36 38 ...	85,500
Wheal Uny	½ ¾ ...	1 1½	... 5 5½ ...	20,992
Devon Consols	1½ 1¾ ...	6½ 6¾	... 17 18 ...	166,400
East Caradon	¾ 1 ...	2½ 3	... 4½ 4¾ ...	26,112
Gunnislake (Clitters)	1½ 1¾ ...	1¾ 2	... 5 5½ ...	37,050
Marke Valley	¾ ⅞ ...	1⅜ 1⅝	... 3 3¼ ...	23,625
Mellanear	3½ 4 ...	4½ 4¾	... 6¼ 6¾ ...	27,500
Parys	.....10s. 12s...	1½ 1¾	...31s. 33s...	47,597
South Caradon	45 50 ...	70 75	...160 170...	61,440
West Wheal Seton	11 13 ...	45 50	... 60 70 ...	34,200
West Tolgus	15 17 ...	25 27	... 60 70 ...	27,136
Wheal Crebor	2 2½ ...	6¾ 7¼	... 12 12½...	60,000
Total				£1,510,805

It will be seen that the above 24 mines have increased in value to the amount of 1,510,805*l*., or an average of 62,950*l*. each. Owing to the Parys Mine having been reconstructed, and the capital increased, we have a difficulty in forming a correct estimate, but the increase stated is, we believe, well within the mark. H. G. S.

PARYS COPPER CORPORATION.

SIR,—I am pleased to find that my letter in the Journal of Feb. 21 has elicited the approbation of three shareholders and the apparent displeasure of the secretary. The latter is pleased to doubt my statement of being a shareholder. Looking to the tone of his letter it gives me neither surprise nor concern that he should doubt my statement. He is also kind enough to suggest the advisability of "my understanding something about the undertaking," &c. I think I do. I bought shares at 10s. a share, and they have risen to three times that figure; but, perhaps, in the eyes of the secretary that is a display of ignorance. Your kind insertion of my letter has carried out my object. My letter has attracted attention, and if the large shareholders choose to pay the secretary and directors living in London—to receive no dividends—let them conduct the business of the company in Anglesea in the apparent apathetic manner in which it seems to be conducted I suppose they are at liberty to do so. The directors and secretaries of mining companies, and evidently the secretary of the Parys Copper Company, are apt to forget they are the paid servants of shareholders—not their masters.

If the shareholders do not insist on the tunnel (alluded to in the correspondence and admitted by the secretary to exist) being driven with vigour, and proper boring machinery applied to attain the object, if they do not insist on the large reserves of copper ore being converted into cash now copper is a good price, and a far larger number of workmen under efficient superintendence being at once employed, they will probably regret their indifference when it is too late, and the present company becomes, like its predecesor, a prey to law and liquidators. If the shareholders at the next meeting resolve to pay the secretary and directors a percentage on the dividends, and shut up the London office, I fancy Pary's Copper would in a very few weeks appear in the list of "British Dividend Mines." I hope I may be able to attend the next meeting and have the satisfaction of hearing myself taken to task by the secretary. It is, I believe, some times the fashion for servants to abuse their masters.

Feb. 28. LOOKER-ON.

EAST PEEVOR.

SIR,—If at any time I inadvertently commit an error I am willing, upon conviction thereof, to correct it. Now, in writing a short letter to the Journal, which you kindly inserted on Feb. 21, I said that this sett was about 2 miles east of Wheal Peevor, whereas I find, by applying the scale to my map of the district, that the distance is only 1¼ miles between the respective boundaries.

I was informed by a gentleman who knows the mines within East Peevor limits that I was under a wrong impression as to the character of the lodes. In order to inform myself as to the extent of the sett (which was marked out subsequent to the publication of my map), and as to all particulars of any interest to parties concerned, I visited the sett on Thursday last to make enquiries and observations, and as I have no desire to injure the promoters of any legitimate undertaking, I will thank you to insert the result of my researches in the *Mining Journal*.

As to the surface of the ground, I have known that ever since the year 1831, and I know that at that time there were two old mines within the limits—The Gomps Mine, which is near Blackwater village, and which was worked for a short time a few years ago by the late Capt. J. Nancarrow and Co., under the name of East Treskerby; and half a mile north from that mine there is another old mine, called Wheal Concord, which was worked about 70 years ago to the depth of about 48 fathoms below the surface.

The workings which Mr. Joel Phillips lately carried on under the name of Wheal Briton in this sett are near Wheal Concord late engine-shaft. He sunk a shaft, called Phillips', 24 fathoms deep, and raised from the lode there 2500*l*. worth of tinstone, which was carried 3 miles distant to a stamping mill, at an expense of 8s. per ton for carriage. He stopped operations because the price of tin was too low to give any profit on his very limited workings. The adit, which is 24 fms. deep, was driven by him and his partners half a mile in length, being connected with the Gwennap great adit, the cost of which was 1300*l*. This adit is of great importance to the present company.

In order to be satisfied in my mind as to the value of the lodestuff now standing in the lode near that shaft, I had several samples taken from as many points, bruised down to a powder, mixed, and vanned, which I found to yield 25 per cent. of oxide of tin. A gentleman, who also went down to inspect, took samples likewise, which upon trial yielded the same produce. These experiments satisfied me that the lode, which is from 2 to 6 ft. in width, will be found very productive. There are 10 lodes in the sett, several of which have been touched only on the backs. The late East Treskerby Company worked slightly on two lodes to the depth of 24 fathoms from surface, and it ceased to be worked about 12 years ago, when tin was low. To show the value of one of the lodes, I may state that two miners working on tribute earned 30*l*. each in three weeks.

At Wheal Concord the operations were carried on upon two lodes by the aid of a rotary engine (24-inch), which was used for pumping, stamping, and drawing flat-rods.

A shaft, intended for an engine, was sunk in East Treskerby, part of this sett, by the late company near the southern boundary of it, which by a further depth of 10 fathoms will, it is believed, intersect North Wheal Busy lode, which at this moment is so very rich as to attract the attention of sharedealers and speculators. The lode underlies towards East Peevor, and, of course, adds considerably to the value of the property. The shaft is well timbered and fit for pitwork. All the lodes in the sett are stanniferous, but I am told by miners that there are blende and copper ores in the eastern portion of the sett. Great Wheal Busy at the south, and having parallel lodes, was rich, so that having Peevor and other rich mines at the west the position of the mine is decidedly good. East Peevor is in the manor of Goonearl, the property of six lords, the chief one being Sir William Williams, son of the late Sir F. M. Williams, Bart., but the tin belongs to the Duke of Cornwall and the lords of Tywarnhaile Tyas in equal moieties. The set is one mile in length on the lodes, and about three quarters of a mile from north to south; area about 400 acres. It adjoins North Treskerby on the west, having nearly all its lodes, and others.

North Treskerby, it is said, has been purchased by Messrs. D. Bain and Co., who will work it vigorously. It is a mine which will, no doubt, give large profits after the engine-shaft reaches the great bunch of copper ore, which could not be pursued for the want of sufficient steam-power, the old pumping-engine being too small. The new engine is an 80-inch.—*Truro, March* 2. R. SYMONS.

A RICH MINERAL COUNTY.

SIR,—It is very strange that so many large deposits of lead (rich in silver) which crop right up to surface in parts of the county Clare remain almost entirely undeveloped, and it is more to be wondered at for the capital required to work them is comparatively small: 2000*l*. in each case would be more than ample, for large and immediate returns could be made right away from surface. I fancy this district must be very little known among miners. During the last half-century six mines have been opened in the county, four of which in a few years paid over 200,000*l* in profits, the other two were trials but a few fathoms deep and through ore ground the entire way, were abandoned, owing to mismanagement, Perhaps these few lines may be the means of attracting the attention of capitalists to the district. I beg to enclose my card and subscribe myself— A NATIVE.

London, March 4.

P.S.—A great deal of the present distress existing in this county might be relieved if two or three mines were opened up.

WHEAL CREBOR

SIR,—Mr. Watson does not represent my case fairly. He says that I sold my shares, and then set off to Tavistock. It is true that I did take fright at the unexpected drop in Crebor shares, and sold a part of my shares. That evening I learnt that an independent inspector of mines was going down to the mine on the following day—perhaps many of your readers may not be aware that any shareholder in a mine is at liberty to go to the mine with an inspector of his own selection, to whom he pays a fee of 2*l*. 2s., and have the mine inspected for his own satisfaction. I met the inspector at the mine, and learnt from him that there was a falling off in two of the lodes, but not to any great extent, and that the falling off is only temporary. He spoke, however, in such sanguine terms of the future of the mine that I certainly do regret very much that I had sold my shares so hastily. Such are the vicissitudes in mining, I have learnt, that no one ought to speculate in mines who cannot bear with equanimity the changes that take place in mines like Wheal Crebor, which is rich in copper, but falls off in value from time to time. Unfortunately, there are too many living in the neighbourhood of Crebor who are ready to take advantage of any temporary falling off for market operations. One thing is certain, that the best of Crebor has not been arrived at yet. It is only to dig deeper, and a lode will be met with superior to any yet cut. A TRAVELLER.

March 3.

WEST CARADON MINE.

SIR,—I was pleased to see in last week's Journal that this once celebrated and rich old mine is to be re-worked. I think the present company are about to adopt a very sensible and proper mode of operations, and I feel confident the adventurers will meet with success. I was a shareholder under the last working, and the mine would never have been abandoned had the lords allowed us to confine our operations to the shallow ground, of which there is a large extent, but we were compelled to continue the sinking of the engine-shaft, involving a heavy outlay for water charges, and rather than submit to this we abandoned the mine. It is well known that some splendid bunches of copper ore have been met with shallow in the Caradon district, and I have not a doubt that such will be found in West Caradon. A few years ago a small branch of ore was met with in the 17 fm. level, and which gradually opened into a bunch of copper which gave nearly 40,000*l*. profit. I see our old manager, Captain Nicholas Richards, is the agent for the new company. No better choice could have been made. He knows the mine thoroughly, and is a careful and cautious manager, and will no doubt remember the fact of the discovery above alluded to. I have been told that in Craddock Moor, the adjoining mine, there are three levels driven up to West Caradon boundary, and in each of which there is a lode worth 3 tons of rich copper ore per fathom. After we had abandoned West Caradon I heard that a private party took up the sett, and commenced to drive from the adit (which, if I remember rightly, is about 30 fathoms deep) to intersect the lode coming in from Craddock Moor Mine. Before this object was accomplished the party got into financial difficulties, and had to abandon the mine, but in cross-cutting I am told a branch of rich copper ore was met with, and was being driven on when the mine stopped. If such be the case (and Captain Richards will soon be able to prove it) I suppose I need not tell such an experienced miner to follow up the branch, seeing what a similar thing led to some years ago in the 17 fm. level. I consider the new company have excellent prospects before them, and I shall watch their progress with great interest.

London, Mar. 2. AN OLD SHAREHOLDER IN WEST CARADON.

THE GRIFFIN LODE—BETTWS-Y-COED.

SIR,—In last week's Journal Messrs. Watson Brothers, in their Mining Circular, fly at me, and call me a Griffin because I asked a plain question about this lode. To do this they go out of their way to pervert my letter, in order that they may then answer what was never written. No attentive reader of the Journal can fail to have noticed that for a long time there has been great difference of opinion as to the lodes in the D'Eresby Mountain, Llanrwst, and Bettws-y-Coed district, and Messrs. Watson Brothers, "Vide et Crede," and mining captains in the neighbourhood have occupied your columns with the subject until I have no doubt that I am far from being the only hesitating investor who is patiently waiting and watching to find under which thimble is the little pea. Naturally, when I find the Griffin Mine actually working such a lode as Messrs. Watson Brothers first informed us of in your columns, and understand it to be a new lode which they have discovered and named, I wish to find whether it can be traced to any adjoining mine with low-priced shares in which I can invest with a chance of a speedy rise when they cut the same lode. That is all I want to know. I have no desire to waste my time or your space in a paper war with Messrs. Watson Brothers, and still less in either puffing or depreciating Aberllyn, in which I have at present no interest, but should be one of the first to secure shares if I could see the Griffin lode cut, and half as good as it is described in the valley, But I must in self-justification refer to the perversion of my previous letter. I did not either suggest or imply that Messrs. Watson Brothers had ever stated they built their hopes of the Aberllyn Mine on the Griffin lode. I did write that I, "as a constant reader of the Journal, could not fail to notice how ever since the Griffin started Messrs. Watson Brothers have been building great hopes for Aberllyn on the Griffin lode." The accuracy of this I maintain, and if Messrs. Watson have any reason to wish to join issue on the subject let them accept the words as written, and I am ready to prove my assertion by simple quotations from their own articles. I think I could quote from their Mining Circular more laudatory notes of the Griffin Company than have ever appeared in any other part of the Journal. I am certain that I have noticed more there than elsewhere, but this may perhaps be due to the extra care with which I always read that portion, as I have great faith in Messrs. Watson's shrewdness in mining speculations, and as a disciple sit at their feet. In making the enquiries I now make about the district I am merely following where they and

their circulars have led me. That I may not make this letter too long to find space in your columns I will not now make any comments on that "dialling, upon authority which I could not dispute." If I go into the matter I shall not hesitate to dispute its results, whoever the anthority. In the meantime, until I receive some more definite reply, I am still as when I first wrote you a—

——— HESITATING INVESTOR

NEW FOWEY CONSOLS (ST. BLAZEY).

SIR,—A most important discovery of copper has been recently made here. In driving an adit towards the celebrated old Fowey Consols a magnificent copper lode has been intersected. The lode is supposed to be the celebrated Trathon's lode, which yielded such immense quantities of copper in the old Fowey Consols. The lode at present is about 2 ft. wide, nearly solid copper, and the depth of the adit is only 15 fathoms from surface. Intense excitement prevails at the mine, and old miners assert that New Fowey Consols will be equally as productive as its neighbour, the old Fowey Consols. I may say that the latter mine paid 1,000,000*l.* in dividends. This is the most important discovery of copper which has been made in Cornwall for some years, and will be the means of bringing back the good old days to St. Blazey again. Some magnificent specimens of ore are at the dressing-floors on the mine; some of them nearly ¼ cwt. of solid copper.

——— C. AND M. E.

DEVON GREAT CONSOLS.

SIR,—In order to allay the uneasy feeling existing in regard to the anomalous position of this property the executive would do well to get it inspected and reported on by two or three managers of the leading Cornish mines, who should at the same time give an estimate of the reserves of minerals, and the profit and loss to raise and return them. This would be a move in the right direction, and nothing short of this will give satisfaction. I would at the same time suggest that a plain and intelligible statement of accounts and balance sheet should be rendered and circulated, and this should contain not only profit and loss on the minerals returned since the present management, but should be signed and vouched for by the managing agent at the mines.

——— PRO BONO PUBLICO.

WEST DEVON GREAT CONSOLS.

SIR,—The readers of the Journal of Saturday last have no reason to complain of the lack of inducements, according to the different opinions of the writers, as to the future prospects of the above mine. It is, however, rather remarkable that up to the present not a line in the shape of the prospectus, with mining captains' reports on the future prospects, &c., of the undertaking, together with the names of board of directors, &c., has as yet appeared in the *Mining Journal*. Why all this secrecy when the speculation is pronounced to be such a grand one? The unwary who are caught by the very tempting statements and plausible advertisements which appear from time to time in print, no doubt are influenced to embark in undertakings which in many instances prove ruinous to them.

In the case of West Devon Great Consols, I consider the readers of the *Mining Journal* have not been put in possession of the honest, straightforward information as to how this mine has sprung so very suddenly into notoriety. I, therefore, beg to enlighten those who may not be aware of the facts of the case. In the year 1872 this mine, under the name of Duchy Great Consols, was started with a capital of 50,000*l.*, Captain James Richards, of Devon Great Consols, being one of the directors and manager. In February, 1876, the whole of this sum being expended, it was found necessary to provide an additional 3000*l.* by the issue of debentures, in order "For the full development of the mine to be carried to completion." In 1877 the workings ceased, and the company went into liquidation, so this ended the grand speculation of the Duchy Great Consols, which now appears metamorphosed into West Devon Great Consols.

Being one of the first supporters of the Duchy Great Consols Company, and also a debenture holder, and not asked to join in the new company, I cannot pass over in silence the numerous "puffs" set forth on behalf of this new undertaking without placing the above before the mining public. One word in conclusion, I hope all the readers of the Journal will consider the letter of "Cautious," under the head of "Mushroom Mines," published in last week's Journal.

March 2 ——— HONEST INVESTOR.

MINING IN LLANARMON.

SIR,—In the Journal of Feb. 21 there appears a paragraph from the pen of your North Wales Correspondent on the above subject. Taking it all in all I think "we shall never see the like again." I am not a F.G.S., nor the son of a F.G.S., and I have, as yet, never attempted to write a book on any subject, and before doing so I should certainly try to master the first simple rules of English grammar. I should also try to do the same if I were appointed to the office of Correspondent of any weekly journal. On the date previously named your North Wales Correspondent commences his paragraph with the following sentence:—"The recent references to the Llanarmon district as a field for lead mining seems to point to two or three conclusions." Whose "references" "seems to point to two or three conclusions?" Are they his own "references," or the "references" of someone else that "seems to point to the conclusions" he himself draws? I should think they are his, inasmuch as he brings no "references" from the writing of any other correspondent that "seems" to warrant his "conclusions." In giving my opinion on his four "conclusions" I should name them absurdity, presumption or assumption, innuendo, and insinuation—the result, bunkum.

I see in the Journal of Feb. 28 that your correspondent—Captain J. A. Ede—takes up the matter on behalf of the Llanarmon district as a field for lead mining, and throws down the challenge like a man to your North Wales Correspondent to meet him on the spot, when he will there and then undertake to show by evidence which cannot be disproved that "there is hardly another district in the two counties (Flint and Denbighshire) that offers such an inexhaustible field for successful and legitimate mining." Bravo! Capt. Ede! That is the sensible way to deal in matters of this kind. But I am afraid the North Wales Correspondent thinks himself too great an authority to deal in detail. It appears to me that he can smell the game while others are scratching the ground to unearth it, and so, by the divinity that is within him, he needs not be shown or told anything by an outsider. No, Capt. Ede, I fear it will be much too hard work for the North Wales Correspondent to descend into the nooks and dingles of Llanarmon to obtain facts which can be given him from observation only. It is much pleasanter to scud across the county in a pony trap, and write letters or notes about waste heaps, lime fields, roofless and empty engine-houses, creaking unused office doors, and speak of some properties in this dilapidated condition as being in this district of Llanarmon when they are not in it at all. The recent "references" of your North Wales Correspondent to "the Llanarmon district as a field for lead mining seems to point" in the minds of your readers who know it very well to other conclusions than those drawn by him. They are considered by many who read your Journal as carping, spiteful, and misleading, and, in the words of Capt. Ede, "they are not fair." And I am sure if I told your readers the remarks that I have heard expressed in the town of Mold anent your North Wales Correspondent's remarks upon the Llanarmon and Mold districts he would feel rather uncomfortable. I think he at least ought to hesitate very much indeed before following up his recent remarks on Llanarmon as he has done of late. It is a serious responsibility for anyone writing for the instruction and edification of the public wilfully to detract from the known value of any district or locality to spite any individual or company. I cannot think your North Wales Correspondent intends to do this, but, unfortunately for him, I know many people have considered lately that his remarks have had that tendency. I cannot myself see what motive there can be in doing so, but the inference is that "they are not fair"—to put it in mild terms.

I am very glad indeed, however, to see that the weight of evidence as brought out by such able correspondents as Capt. Ede, Mr. J. L. M. Fraser, and others, is very much in favour of the district of Llanarmon as a field for lead mining. The best way, in my opinion, to counteract misstatements, wrong conclusions, and anything having the appearance of a bad disposition is to meet everything of the kind with solid, reliable, authoritative evidence. This I feel sure can be done, and this, as far as I am concerned, shall be done. I here echo the feeling that prompted the expression—"Lay on, MacDuff, and ——— be he who first cries 'Hold, enough.'" ENQUIRER.

March 1.

GLENROY.

SIR,—As there have been contradictory statements in recent numbers of the Journal regarding the above mine as to whether it adjoins Great Laxey or not, I beg to state for the information of those of your readers who may be interested that Glenroy was part of the Great Laxey sett, and there is nothing between the boundary of the two companies, therefore it is clear that they do adjoin each other. That Glenroy lode is the same as Great Laxey lode is another matter; the two are parallel lodes, and Glenroy has this similarity to Great Laxey that it is showing improvement as the shaft increases in depth. Specimens of the lode lately sent to the London office of the company are certainly encouraging KELLY.

WHEAL CREBOR.

SIR,—The poor "bears" are again under the lash; but they are usually good barometers, and I fail to see are not necessary evils of public benefit, The mischief is too frequently achieved by the "bulls;" but I am at a loss for any distinction of honesty between the "rival" elements, coming to the conclusion that priority of information and acting thereon is a fair game for "One and All."

March 4. ——— WATCH DOG.

MUSHROOM MINES.

SIR,—In last week's Journal "Cautious," speaking of the Chiverton district, says—"The only surviving one is Chiverton East, which, like its compeers, has never that I have heard produced lead enough to make a spoon." Will you kindly allow me space to inform "Cautious" that several hundreds of pounds worth of lead has been sold from this mine, and fully 10 tons broken from the 74 fm. level will be sold to credit in our next accounts, whilst we have a level 15 fms. below this point just now coming in under the productive ground. One would think that "Cautious" would certainly be cautious enough to write the truth, but such wilful falsehoods and gross misrepresentations cannot possibly do any good to himself or the mining community at large, and my advice to him is to mind his own business and keep his ridiculous, gratuitous advice to himself.

East Chiverton, March 4 ——— R. SOUTHEY.

MUSHROOM MINES.

SIR,—As the secretary of the East Chiverton Mine, which, with the exception of West Chiverton, is, as "Cautious" in your last Saturday's edition rightly observes, "the only surviving one of the family of Chivertons," but who, I am inclined to think, invidiously insinuates, under the plea of "feigned" ignorance, that the mine in question is a "mushroom mine," "which, like its compeer has never," he adds, "that I have heard, produced lead enough to make a spoon."

With a view of cautioning "Cautious" not to volunteer erroneous statements in future, and thereby mislead, I take the liberty of letting him know that East Chiverton has met with and has raised and sold lead ore from every level from the 25 down to the 74, and that the ore has realised as high a price as 22*l.* 4s. per ton for the crop, whilst the second quality sold for 16*l.* 11s. per ton.

I venture to think I am as near the mark in saying that the sale of ore on one occasion produced silver enough to make a massive service, as "Cautious" in saying "not lead enough to make a spoon;" and even suppose the mine had not, what business had "Cautious" to interfere with a property he is ignorant of or appears to be. Maybe he is interested in a mining property with an entirely new name to be presently puffed up to the celestial from the terrestrial. I must say I look upon such as "Cautious" with some amount of suspicion. Why not sign his name like a man?

32, Queen Victoria-street, March 4. GRANVILLE SHARP.

MUSHROOM MINES, AND "CAUTIOUS"

SIR,—Your correspondent "Cautious," of last week, seems to me to be anything but cautious, at least in his statements, and although he may think himself very cautious, yet few will fail to notice that his object is to depreciate the value of certain mine shares, no doubt with the cautious, if unscrupulous, object of buying up good shares for a trifle after he has frightened more timid persons than himself into selling. But, Sir, "Cautious" has been very rash, and no doubt the only effect of his so-called caution will be to cause holders of the shares he names or hints at to look well before they part with their property to benefit either "Cautious" or his friends. The fact of a person who has the audacity to sign his name "Cautious," and write of the mines in the neighbourhood of Tresavean and Penstruthal as the most useless trash, and when his aim is to disparage Wheal Peevor, to pen "on any little success," and when his attempt is to run down Wheal Crebor to allude to the discovery there as the "cutting of a bit of ore at Wheal Crebor," not to mention his attempt at absolute untruthfulness in respect to the produce of metal at East Chiverton, where he just escapes being branded as a ——; well, I will not say what, by the saving clause, "that I have heard," thereby confessing his ignorance. But, Sir, that is no excuse for deliberate misrepresentation when he could have had full details had he troubled himself to refer to a file of the *Mining Journal*, and had he been a cautious man he would have consulted you ere he penned his absurd list of Chivertons, seven-tenths of which never have been, and the other three-tenths either are or have been, among the most successful mines in the kingdom, makes it seem very likely that his advice is not so very disinterested as he would like your readers to imagine, and it will be safer for holders of shares in the various mines he hints at or calls "mushroom" to be satisfied of the real value of them ere they play into the hands of one whom I should advise, ere he writes again, to try and obtain— A LITTLE MORE KNOWLEDGE.

MUSHROOM MINES.—"CAUTIOUS" AND EAST CHIVERTON.

SIR,—I take it that everyone who troubles you with a letter has some object in view; if he has not he is a fool. If he understands what he writes about, and honestly tells the truth, he is quite justified, whatever his object, but when he deliberately states what is untrue he deserves to be castigated for his dishonesty. My object in writing this is to protect my own interest and property as well as that of my fellow-shareholders in East Chiverton. The object of "Cautious" in his letter of last week, under the head of "Mushroom Mines," is plain to be seen; he wishes to throw dust in the eyes of shareholders in East Chiverton by deliberate untruth. As "decoy ducks" he introduces Peevor, Tresavean, &c.; but Chiverton is his aim. That name has a magic power over him that causes him to forget all else, even truth, until he culminates in absolute falsehood. As to East Chiverton, he states, after puerile repetition of names:—"The only surviving one is East Chiverton, which, like its compeers, has never, that I have heard, produced enough lead to make a spoon." Here in this short extract, stated or implied, are four direct falsehoods. How any man could indite such palpable lies, even for the object of depriving the shareholders of their shares, I can't understand. Why, the whole world knows of the riches from West Chiverton, where close on to 700,000*l.* worth of silver-lead has been taken from the same identical lode that East Chiverton is working on and just opened on at the 90 fm., which is one of the points aimed at since East Chiverton has been worked. No doubt "Cautious" knows that could he only get hold of the shares now, he would likely reap where others have sown; but as a shareholder I protest against this barefaced mendacity. Let me tell him that since I have been a shareholder East Chiverton has sold some 40 tons of rich silver-lead, some of which ore has fetched 20*l.* a ton, having 22 oz. of silver to a ton, and this from stuff saved from the levels in opening out the mine. I have been through the mine, and may tell my fellow-shareholders that between the 74 fm. and 64 fm. levels there are hundreds of tons of the same quality ore high and dry, left when lead was cheap and now being on by stopes. As I before said, the 90 fm. level is just being opened on, and the chances are that between the 74 and 90 fm. levels thousands of tons of lead will be found. If any doubt it, go and see yourselves. This is the clue to the object of "Cautious's" disinterested advice. Then let it be a caution to us to hold our shares. So long as "Cautious" has not given his name, I don't consider he is entitled to mine, but enclose my card to you, Sir, as evidence of my *bona fides*. J. B.

Stanley, March 4. ———

DERWENT LEAD MINES.

SIR,—In the notice of these mines contained in last week's *Mining Journal*, I notice that hy a typographical error it is stated that the sales since 1834 have realised about 100,000*l.*, this should be *a million* sterling (1,000,000*l.*). Kindly correct this in your next issue and oblige.— ——— J. H. A. SMITH, Sec.

DERWENT LEAD MINES.

SIR,—I am glad to see you are calling attention to this splendid property. It will more than bear comparison with many other concerns, the shares of which are much higher. I have looked well into it, and have bought some shares before they go up, as they must do before long.—*March* 1. ——— H. S.

DERWENT.

SIR,—What are the public about? The shares of a lot of mines have lately run up from a few shilings to many pounds, and the best of all is quite neglected. Is there another company in the market that can compare with Derwent? It has three or four rich lodes, which have yielded nearly a million of money, though as yet worked less than 100 fms. deep, and with about a mile on the run of the lodes still untouched to surface. There is a large quantity of good ore ground opened, most valuable discoveries are likely to be made soon, and, with no further advance in the price of lead, large profits must be made. Besides the very favourable report lately given by the famous Capt. Waters, Mr. John Taylor has just added his most valuable approval of the property, which he considers will be a great success. Beyond this, the company has very judiciously bought the freehold of the minerals, so that in future they will have no royalties or rents to pay—a very heavy item in the expenses of all other mining companies. Considering that there are only 12,000 shares of 4*l.* each, and a large balance (after paying for the freehold), I again ask—What are the public about not to look after these shares before the great rise that must take place? A RECENT SHAREHOLDER.

March 2.

DERWENT

SIR,—A few months since I had the pleasure of paying a visit to this mine, going carefully over the dressing-floors, smelt-house, &c., and afterwards thoroughly examining the underground workings. These latter are so extensive that at least another visit would be required to fix them on the memory. However, the excellent working plans made by Capt. Morpeth, and kept in his office on the mine, are everything that is required by those wishing to gain a knowledge of the sett, so far as the levels, stopes, &c., go. As to the value of the different parts of the mine, they are carefully and honestly set forth once a month in the Journal. Personally, I may state that I was much gratified at all I saw, and within a few days of my visit had increased my holding in the company fourfold. I have just read the report on this mine by Mr. John Taylor, which will be issued in a day or two, in which, amongst other things, attention is called to the prospecting work now going to reach certain sills, which in other parts have proved so rich in lead. I believe this report may be seen by any shareholder on application at the London office. There is one very important feature in this case—there is no rent or royalty to pay, the proprietor having agreed to sell the freehold of the minerals, after paying for which the company will have a handsome balance left, independent of which, and without counting on the expected discoveries, the mine should, at the present output and price of lead even, make a profit, but much more is confidently calculated upon. ——— BLANCHLAND.

MOST VALUABLE, AND STILL GREATLY THE CHEAPEST, SHARES IN THE MARKET—DERWENT.

SIR,—In the last few months there has been a great advance in the price of metals, particularly of lead, and the shares of many mines have risen enormously, and yet no notice has been taken in the market of by far the most valuable concern of the whole. The lead mines worked by the Derwent Company are in the richest lead district in the kingdom, and though as yet only 95 fms. deep, and the lodes have been driven on for less than half the whole extent of the very large property, the returns have realised as much as 1,000,000*l.* sterling. There are three lodes which have been very rich in the upper sills, and a cross-cut is now being driven at 95 fms. deep to cut one of these—the north lode—in the great limestone, which is expected to be accomplished in about three months, and if found good it will add greatly to the value of the property, as there are 18,000 fms. of ground in the great limestone alone on this lode untouched in the property. They have also been driving for a long time to the Burnshield Haugh lode, and it is believed that they are now close upon it. This lode has yielded largely in other mines in the district, and if met with rich in Derwent it would give the company a practically unlimited run of ore ground. Capt. Waters, the well-known successful manager of Roman Gravels, Tankerville, and other important lead mines, has lately given a most favourable report on Derwent, which he considers a prize. Mr. John Taylor (head of the old and very eminent firm of John Taylor and Sons) has also reported most favourably, entirely supporting Capt. Waters in anticipating very successful results. It should be mentioned that for the last two years this company has used Dunn's Rock Drills, which has enabled them to prosecute the works very expeditiously. But, in addition to all the above, the company is about to complete the purchase of the freehold of the minerals in their extensive sett (about 2500 acres, and nearly 1800 fms. on the course of the lodes), which will relieve them in future from the payment of any rent or royalty, and from all provisions and covenants as to the workings. This is of the utmost value to the company. It is well enough known that all other mines pay heavily in rents or royalties, several in the Derwent district paying, we believe, as much as 8000*l.*, and even up to 30,000*l.* a year. I should add that a large quantity of ore ground is already opened at Derwent, and that regular monthly returns are made; and further, after paying for the freehold as above, they will have a considerable balance in hand.

I have given a mere outline of the merits of the property, on which there is a very extensive and valuable plant), but I have shown enough to prove that the shares ought to be worth much more than par, there being altogether only 12,000 of 4*l.* each, nearly all well held. If any of your readers take advantage of my hint I feel sure they will not regret it. AN ORIGINAL SHAREHOLDER.

March 3.

DEVON COPPER AND BLENDE MINING COMPANY.

SIR,—Will you kindly oblige by inserting the following, which I received this day. W. BAWDEN SKEWIS, Secretary.

Higher Market-street, Tavistock, March 2.

Assay Office, Tavistock, March 1.

DEAR SIR,—I enclose the list of the last monthly samples when the mine was worked as the Collacombe Mine, and on looking through my books I find the produces just the same. M. A. HARVEY.

List of samples, with percentages for copper:—

	Per cent.		Per cent.
No. 1.	5	No. 7.	9
2.	7	8.	7
3.	6⅝	9.	6⅝
4.	5⅞	10.	8⅛
5.	8¼	11.	10¾
6.	7½		

M. A. HARVEY.

DEVON COPPER AND BLENDE MINING COMPANY

SIR,—May I ask the favour of your again inserting in your valuable Journal a few words from me with regard to this company, in which myself and friends are large subscribers. It seems from the great interest taken in the reworking of the mine by the old shareholders and the mining workmen, as well as the different captains who know the property, that there is no doubt the company is already on a firm footing (or, I may say, launched). It is the old tale over again—the public will always invest in a sound and proved undertaking, and

it does not require the financial puff now-a-day so resorted to by company promoters to get the shares taken.

The Devon Copper and Blende Mine is so situated that it is on the top of a high hill looking down upon the Great Devon Consols Mines and various other mines. It adjoins the turnpike-road by which the Prince of Wales will travel in May next from Tavistock to his recently purchased property of Sir Wm. Call, Bart. (who is also the owner of this property). A deputation is being formed to ask the Prince as he passes the mine to christen the new engine, and receive a hearty welcome with a cheer from some thousands of miners and shareholders in this company. SHAREHOLDER.

Forest Hill, London, March 3.

DEVON COPPER AND BLENDE MINING COMPANY.

SIR,—Having subscribed for shares in this company I think your readers who have subscribed for shares, like myself, will be glad to learn that the secretary informs me the directors will, so soon as convenient, apply for a quotation on the London Stock Exchange, as also Glasgow.—*Lawrence Pountney Hill, March* 2. W. F. F

DEVON COPPER AND BLENDE MINING COMPANY.

SIR,—I notice that the secretary of this company has inserted my letter (dated Feb. 23) to him in the Journal. Although the letter was to him personally, I am not sorry that he published it. I have no doubt the mine when pumped out and properly worked will be found even more prosperous in returning dividends to the shareholders than it ever did before the engine burst and the mine stopped. On enquiry, the secretary writes me that some 150 miners are expected to take shares, a considerable number having already applied. L. R. G.

WEST DEVON GREAT CONSOLS.

SIR,—I have read with much satisfaction the correspondence in last week's Journal respecting this mine. All experts in the locality entertain the highest opinion of this property, and consider it second to none in the prizes of 1880, and will turn out another Wheal Crebor. It is not generally known that tributers are earning excellent wages, and are rapidly opening on the rich discovery lately made. That these shares will see a large figure this month seems certain. When one refers to the wonderful history of its very near neighbour, and that the same depth is now obtained from which Devon Great Consols is paying handsome dividends, and likely to see (as declared at the last meeting) 34*l.* a share once more. The rise in copper ore being certain, and that the rich south lodes run without doubt into West Devon Great Consols, make this speculation of no ordinary character. The rising market in these shares speaks well for the estimation in which the mine is held by investors. OBSERVER.

Meetings of Public Companies.

PANDORA LEAD MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Austinfriars, on Thursday,

Mr. SAMUEL YORK in the chair.

Immediately after opening the CHAIRMAN expressed his regret at the unavoidable absence of the Chairman of the company (Mr. J. J. Pyne), owing to indisposition. He was very sorry that the shareholders would be deprived of Mr. Pyne's extended knowledge of the mine, which he had visited on several occasions, and was, indeed, a favourite mine of his.

The notice convening the meeting having been read, the following report of the directors was submitted:—

Your directors have considerable satisfaction in referring you to Capt. Nottingham's report, which has been circulated with the balance-sheet. You will find that during the 12 months embraced in the accounts 219 tons of lead ore have been sold for about 1995*l.*, and 203 tons of blende for 433*l.*, making the total sales for the year amount to 2428*l.*, against only 1478*l.* in the previous year. Some months ago your directors again took into their serious consideration the necessity of sinking the shaft to deeper levels, a step which they had been prevented from carrying out before through want of funds. They are now, however, glad to report that they lately succeeded in obtaining a loan of 1000*l.* (for five years) on the security of the mine and plant, with the power on the part of the company to pay off the same any time after two years. The mortgagees are principally shareholders in the company, and the option has been given the lenders to take up, to the amount of the loan, some of the unissued shares at 2*l.* per share (with the bonus shares attached), provided the option is exercised in two years. Your directors are, therefore, in a position, as far as funds are concerned, to push on the various works as quickly as possible. The recent very important recovery in the price of lead has, of course, been very gratifying and most encouraging for those interested in lead mining. The advantage to this mine is so great that it has led Capt. Nottingham to say in his report that "with a regular and progressive development of the mine, and the prices now obtainable for the ore, I venture to say that we shall be able to make a considerable profit on this year's workings. There having been a vacancy on the board your directors elected Capt. A. Coombs to fill the same. Your directors have to report with regret the loss of the services of Mr. C. J. Hill, who has retired from the board. One of your directors, Mr. S. York, retires in accordance with the Articles of Association, but being eligible offers himself for re-election, as does also the auditor, Mr. E. Ashmead.

The agent's report and the accounts, showing a balance of assets over liabilities of 204*l.* 4s. 6d., were taken as read, and the following report from Capt. Nottingham, dated March 2, was read:—

March 2.—New Lode: In the 33, driving south, this end is still producing strong blende, and showing a little lead. The stope over this level is without change, worth 1½ ton of lead and 1 ton of blende per fathom.—Goddard's Lode: The 33 end being full of stuff, I have put the men to stope a piece of the back of the level, south of No. 1 winze, where we have some nice ore going up under the stope above; as soon as we can clear the end of stuff driving will be resumed. The other stopes are equal to last valuations.—Engine-Shaft: We are making good progress with the sinking below the 33; the lode is very strong, yielding a good deal of blende, with an occasional stone of lead, the first we have seen in the lode here. We have to-day one of the heaviest storms and flood for this winter, which has stopped everything outside, otherwise fair progress is being made with dressing, &c.—H. NOTTINGHAM.

The CHAIRMAN said the report was really so very clearly set forth, in which every particular was gone into, that it needed very few remarks from him in moving its adoption, but if any of the shareholders wished to ask any questions he would be very pleased to answer them. He could only say, so far as the Pandora Mine was concerned, that he did not think there was another mine in the neighbourhood equal to it. It was situated in a splendid district. They had gone through large courses of ore, and during the past twelve months they had sold 219 tons of lead at an average of 9*l.* 2s. 6d. per ton. That price was, of course, a ridiculously low one, and if they had had the price current at the present time—about 12*l.* 10s. to 12*l.* 15s. per ton—they would be in a very different position from what they were. At the same time they had ample funds to carry them on to other levels, and to drive out on the course of the ore; and as they had, he thought, one of the best agents in Capt. Nottingham that a company could possibly have he was of opinion that a satisfactory future awaited the company. Capt. Nottingham had been very devoted to his work, and had always paid the greatest attention to the development of the mine. He had frequently expressed his confidence in the undertaking; and as all that Capt. Nottingham had predicted has been verified so far, he (the Chairman) and his colleagues were thoroughly satisfied with their agent. Capt. Nottingham had had the opportunity of going over the other mines in the district, and he believed that Pandora would prove to be more than equal to any of them, and that he would be able to satisfy the shareholders in the future. The Chairman then moved the adoption of the report and accounts.—Mr. T. BUSH seconded the motion.

Mr. WILKIN said he had noticed that Capt. Nottingham in his reports sometimes referred to a difficulty on account of the supply of water, and he asked whether some means could not be adopted, by tanks or otherwise, to ensure a more constant and regular supply?—The CHAIRMAN replied that that matter had been under the consideration of the board, and an order had been given to Capt. Nottingham to proceed with the new reservoir. The cost of this would be a very moderate one, not more, he thought, than about 50*l.*, and this would enable him to work on through the summer without any hindrance. The want of water had been a great difficulty with them, but not having much money to spend they had had to be very careful in their expenditure. If the mine had been taken up the shareholders with the spirit and feeling that it really deserved they would have had much larger funds at their back than they had, and they would have been able to go on without any hindrance, and the company would no doubt be in a much better position. He was, however, quite satisfied with what they had, and what they had done, and he thought that any shareholder who visited the property would be quite satisfied with it.

Capt. NOTTINGHAM said the shareholders must be aware that he had been prevented from carrying out the plans he had in mind at the beginning of the year, to which reference was made at the last meeting. If he had gone on as he intended he could have made larger returns of ore, but the prices in the market were so unsatisfactory that it was decided to restrict the output.

The LONDON MANAGER remarked that at the time referred they were only getting 7*l.* per ton for lead and 1*l.* for blende.

Capt. NOTTINGHAM added that he thought the wisest plan had been adopted in restricting the output. They had proceeded as fast and as far as they could, and even at the low prices which they had realised they had been able to carry on the bottom drivings to a certain extent, and to open the ground. He had endeavoured, as far as possible, to maintain their position without selling much lead at the very low prices. He thought they were now in a better position than they had ever been in before—(hear, hear)—and they had a prospect of being able to go on without interruption. They lost about one month owing to the frost and the drought in September, but they had now an abundant supply of water, and as they had a pumping-engine at their back they could reserve enough water for the ore dressing; and he did not see any reason why they should not go on until next winter without any stoppage. If they did so he was not afraid to say that they would show better results than they had had yet—(hear, hear)—and better than had been calculated on, unless some failure took place in the runs of ore, which there was no reason to anticipate. He thought they would be able to show some of their neighbours who had been crowing over them for years past where their mine is and where the lead is. (Hear, hear.) Of course, their mine had not been opened to the extent that it could be called a great mine yet; but so far as the development went, he thought it spoke very well for itself.

The LONDON MANAGER remarked that about 15,000*l.* worth of lead and blende had been sold from the mine, although the 33 was the deepest level, and, of course, a great part of that had been sold at very low prices.

The CHAIRMAN thought that fact spoke volumes.

Capt. NOTTINGHAM said one very favourable thing in their position was the increase in the price of lead, and another was that the quality of the blende was considerably better than it had been, which spoke very well for the lode producing better and stronger bodies of lead in connection with this blende. He liked to have rich blende, for it was generally found that rich blende was closely followed by rich lead.

The LONDON MANAGER said that all the large lead mines—such as Van, Minera, and Great Laxey—made large sales of blende as well as lead.

The CHAIRMAN could not but regret that there was not a larger body of shareholders present at the meeting, and that they did not take more interest in the position of the company.

The report and accounts were then unanimously adopted,

Capt. A. COOMBS proposed the re-election of Mr. S. York, the retiring director.

Mr. T. BUSH seconded the motion, which was carried.

Mr. WILKIN proposed the re-appointment of Mr. Edward Ashmead as auditor.

Mr. F. COOMBS seconded the proposition, which was carried.

A vote of thanks was then passed to the Chairman, and the mover thought the shareholders had reason to congratulate themselves on the improvement in the position of the mine.

The CHAIRMAN in acknowledging the compliment said nothing would please the directors better than to be able to declare a dividend, and he did not think the day was very far distant, if the price of lead kept up and the mine progressed in the way that Capt. Nottingham foreshadowed, when such a declaration would be possible. He felt satisfied that before the close of the present year they would be able to announce something which would be satisfactory to the shareholders.

Capt. NOTTINGHAM having thanked the Chairman and the shareholders for the kind expressions made use of with regard to him, the meeting closed.

CAKEMORE, CAUSEWAY GREEN, &c., BRICKWORKS AND COLLIERY COMPANY.

An ordinary general meeting of shareholders was held at the company's offices, Finsbury-circus, on Tuesday,—

Mr. H. J. MCCULLOCH in the chair.

The SECRETARY read the notice convening the meeting, and the other usual preliminaries were disposed of.

The CHAIRMAN said: We regret that we have to meet you without a dividend, but times have been against us. We will frankly acknowledge that we have, perhaps, spent too much money before we had it in hand, but there is no doubt as to its having been well spent. Cheapness is not always economy, and for every penny spent you have got more than your penny's worth. For some years past coal has been at such a price that many of the colliery owners have been losing money. They made large sums in the good times, but instead of keeping the money they sunk more collieries than trade required. I speak with authority because I happen during the last few months to have made a complete report on all the collieries in the North, and in South Wales, but we are better off in South Staffordshire, where the Thick Coal field is too much exhausted for many new collieries to be opened. Even there, however, we have had our bad times, but we hoped that at the beginning of 1879 we were going to have a revival in the coal and iron trades, and that we should have a good demand for our Thick Coal. Well, instead of reviving it went lower still, and the report will tell you that until the latter end of last year it was very stagnant indeed, and that it is only just now that we are beginning to feel any benefit from the improvement in trade. Now, however, a change has actually taken place, and I believe we shall have a very good year, and the experience of the past will serve the directors well in future. It is very curious that in scarcely any district has there been such a revival in the coal trade as in South Staffordshire, except in the coking collieries. The Thick Coal happily does away with the coke business, and our Thick Coal has been rising as the coke in the North, and although the South Staffordshire coal trade has improved so rapidly I think it will improve still more, and that there is a bright prospect before us. Turning, on the other hand, to our brickworks, they are all that can be desired. There are a few additions that might still be made with advantage, but practically the money expended has brought them into a very perfect condition. I have no doubt that with the two businesses combined we shall before the end of the present year be able to show the shareholders that we can pay them a very good dividend all round. The exceptionally severe winters have also militated against us by rendering the transit by canal (by which the chief part of our produce goes) both expensive and inconvenient. Our drivings or headways in the colliery have at last been driven right up to the boundary, and this would have been done much earlier and at much less cost had there been trade enough to keep the colliery always at full work, for if you keep a place always working you can work it much cheaper. We have now got to the boundary, and have commenced to work back again, and our percentage of round coal (which while we were passing through a somewhat soft roll of ground was not so large as you would like to see) has already improved, and our engineers (who are here, and will answer any questions you may choose to put to them) will tell you that we shall have a still better percentage of large coal in future. During the last week we have reached nearly 1400 tons, and I have no doubt we shall (barring accidents) average fully 1500 tons a week throughout the year. As regards the expected increase in the percentage of round coal, that class of coal is bringing us from 9s. to 10s. a ton at the pit's mouth, while the rough slack only fetches from 4s. to 5s. per ton. The charters for winning these coals are 3s. 10d. and 2s. 8d. per ton respectively. I have no fear as to the activity in the iron trade continuing, for there are already orders in Staffordshire which will last many of the makers over two years, and there are fresh blast-furnaces being blown in as fast as they can, and every fresh blast-furnace that is put into operation will add to the price of our coals. Hence there is no doubt that we shall have a prosperous year, but we shall have to ask you by-and-bye for leave to increase our capital. You need not be alarmed at that, because, although we shall require 15,000*l.* or 16,000*l.* to clear our feet, we shall be commencing immediately to have money in hand. The work has been well done, and the money must be paid for it, and that is why the directors have recommended the issue of new shares to the extent of what our requirements will be be. There are some samples of the bricks in the room that will bear examination, and I am quite sure that there is not a single maker in Staffordshire or any other shire which can beat us in those goods. Our blue goods are really first-class, and I believe we shall have a ready sale for every brick we can make, and I think we average about 150,000 per week, and could probably increase this to 180,000 per week. I shall be glad to answer any questions, as will also our engineer, who is present.

The SECRETARY then read the report.

The CHAIRMAN moved and Mr. UNDERWOOD seconded that the report and balance-sheet be received and adopted.—Mr. HORTON enquired whether the bills payable were bills owing by the company?—The CHAIRMAN said they were, and it is partly for the purpose of meeting them that they want the increased capital. After all the money was expended they found that they had other payments to meet, incurred for the putting up of machinery, drying-floors, kilns, and other things. It is the remnant of what I just explained to you for which we were obliged to exceed our capital.—Mr. HORTON: I see the directors are authorised to borrow a certain sum of money according to the Articles of Association. Have they exceeded that amount?—Mr. EDGAR said it was just within that amount.

The CHAIRMAN said that they considered that it was no use to have the whole crippled because some parts were not able to work up to the same capacity as the others.—Mr. HORTON: The freeholders' purchase account was a liability taken over from the late company!—The CHAIRMAN: Yes, and mentioned in the purchase agreement. The company bought from the former freeholder, and he sold since to the present freeholder.

Mr. HORTON asked whether the preference shares had a priority over anything else?—The CHAIRMAN; No; only in the question of dividend. They merely have a first charge on the profits. The money has gone into the works.—Mr. HORTON: Has the siding to the railway been made?—The CHAIRMAN: It has not.—Mr. HORTON: Was not the money raised for that purpose?—The CHAIRMAN: Not specially for that purpose. It certainly was one of the objects, but we found it good policy to delay it until we got the railway rates reduced, which took a long time negotiating, and meanwhile, as I explained before, we had so much to do to bring parts of our plant up to the same capacity as other parts that we had spent all the money on the works; but we have now made them so complete that if you went down yourself you would be delighted.

Mr. HORTON: The works are surely incomplete without a siding?—The CHAIRMAN: Hardly so, there being two railway companies to deal with. We wanted them to reduce their tariff to 5s. a ton, but we had a difficulty to get it to even 6s. 8d. a ton, and meanwhile, therefore, we are sending our produce by canal, leaving the question of the siding until we get a special rate.—Mr. HORTON: There was a certain engine which was pointed out when I was at the works which was to do the underground work cheaper. Has that been fixed?—The CHAIRMAN: Yes, and is doing its work well.

Mr. HORTON: Can you dry the bricks after you have made them?—The CHAIRMAN: Yes; and therein lies a very important portion of the extra expense. We have made two splendid drying floors, and can dry the bricks in all weathers as fast as they are made.—Mr. HORTON: So that our money has been judiciously expended on the works, and to yield a profit, that is all I want; and I shall certainly take the opportunity of personally inspecting the works.

Mr. H. JORDAN said the present capital of the company, comprising both brickworks and collieries, is only 90,000*l.* I think it is too small to carry on two combined businesses of such magnitude, and that we must have further capital, and I have long been of that opinion. I have gone minutely into every point, and am satisfied in every respect. With regard to the siding, I think it is important we should have it at once. Of course, the canal is very important, but I wish to see the siding done, because I am arranging with certain coal buyers to take large quantities of coal, they having already tried it and liking it, and they will send their own trucks in for the coal providing the siding is open. With regard to the amount of the increase in the capital, I presume it will be 30,000*l.*, and I think there will be no difficulty in getting the money.

Mr. INCHBALD enquired what proportion of the 30,000*l.* would be required for fresh works, and what proportion would be used to cancel the liabilities?—The CHAIRMAN: We want about 15,000*l.* to the end of October to clear off all our liabilities—that is, to set us free, and then, perhaps, a few hundreds will do what we want in the actual work. The siding would be about 1800*l.* more, but we have not decided about that, though we shall very probably do so now.

Mr. S. KING CHURCH: I have been throughout one of the principals in the negociation about that siding, and the reduction in the railway rates, having accompanied the Chairman (whose influence has been of very great value) upon almost every occasion. We saw the railway people time after time with a view to obtaining a reduction in the rate of carriage of bricks to London, and did hope that we should succeed in bringing them down to such a rate as would allow us to bring up to the London market the red bricks which we were then making in large quantities from our upper layers of marl. One of our principal arguments throughout the negociations (which occupied a long time) was that we would put a siding in if the rate was sufficiently reduced, and we should have lost that lever if we had done it at first. Had it not been for this we should probably enough have used some of the first moneys for the siding. The result of the negociations was to effect several reductions, bringing down the price from 9s. 6d. to 6s. 8d. per ton, which, as our bricks weigh nearly 4 tons per 1000, forms an important saving, and was a great thing to accomplish, as no reduction had been made for years, and there is no doubt that our neighbours (who all participate in the benefit) ought to be very much obliged to the directors of this company for effecting it. Now the bulk of our trade is in blue bricks, which, as higher-priced articles, can better bear the rates of carriage, but even now I think it might be worth while to try and make the construction of the siding a condition of the rates being reduced to 6s. per ton. Meanwhile, sooner than cart bricks to the station, we are sending them by canal to a station on the London and North-Western line at a cost not much in excess of what it would be with the siding; however, it is an object with regard to bricks not to have transhipments, and there is no doubt that the siding would now be valuable to us, especially with the anticipated increase in our out-turn, and if we can make reasonable terms I think no time should be lost in completing it.

Mr. EVANS, the auditor, having answered numerous questions of Mr. Hooper as to the accounts, the report and balance-sheet were unanimously carried.

The CHAIRMAN: We have lost one director during the year, General Maxwell, but we have been very happy in securing a coadjutor in Mr. Edgar, and I think we have also made a happy choice in our election of Mr. Underwood. We have to elect auditors, and I have pleasure in moving that Messrs. Evans and Pierson be appointed auditors.

Mr. S. KING CHURCH: My partner and myself are freeholders of this property, in which capacity, however, we have always studied the interests of the company (in which we hold a large stake) even before own. For example, we have never even asked for rent or royalty when the company has been short of money, and have, in fact, always supported and assisted it to the utmost of our power. Now, we cannot help feeling that throughout a time of very great depression this company has been laying out very heavy sums of money upon our property, which has largely increased its value, and we regret that there should be no interest paid for the money. We feel, therefore, as landlords (especially as the property has been benefited) we ought to bear some share in the bad times, and we are accordingly willing to give back out of the money due to us a sufficient sum to pay the preference shareholders their dividend from April 30 to Dec. 31. We leave the company to pay the amount over to the shareholders as soon as they come into funds to do it, but we make an absolute gift of the amount. We have a double object in doing this—we wish the shareholders to have their interest, and we wish to see the company start fair with 1880, which it would not do if the profits had a first charge on them for the arrears of the preference dividend for the last eight months of 1879. The expenditure on capital account having ceased for some time past, and the various arrangements for economising labour, and increasing and expediting the output being completed, the company ought now to do well. Mr. Latham can speak as to the underground arrangements, as also to the recent improved arrangements at surface for delivering the coal at the wharf by a direct tramway dipping underneath the road, and worked by steam, instead of taking them, as heretofore, by horses over a tortuous and much longer tramway, having level crossings over the turnpike, an arrangement which has much cheapened and facilitated the delivery of both coal and bricks.

The extraordinary meeting, called for the purpose of discussing the issue of further capital and passing the necessary resolutions, then commenced.

The CHAIRMAN having stated it was not necessary for him to recapitulate the facts, which had already been fully gone into at the previous meeting, invited the shareholders to discuss with the directors the point as to which would be the best method of issuing the further capital.

Considerable discussion took place, in which several shareholders, and especially the company's broker (Mr. Inchbald), and another broker who was present, took a prominent part, and it was decided that the best method would be to issue at par 10,000 preference shares, to be called B shares, and to have a preferential dividend of 7½ per cent., ranking next to the existing preference shares, and participating like them in surplus dividend beyond the 7½ per cent.

The requisite resolutions for this purpose were then accordingly put, and carried unanimously.

The CHAIRMAN: These resolutions will have to be confirmed at another extraordinary general meeting within a month, and of which you will receive due notice. I hope you will all attend again, for we may have something good to report to you, and the directors like to meet the shareholders.

Mr. HORTON: I beg to propose a vote of thanks to the Chairman for the able manner in which he has discharged his duties.

The vote, which was then duly seconded and carried unanimously, closed the meeting.

GREAT DYLIFFE MINING COMPANY.

The second ordinary general meeting of shareholders was held at the offices of the company, Moorgate-street, on Feb. 27,

Capt. H. JERVIS ALFRED, the managing director, in the chair.

The CHAIRMAN read the notice calling the meeting, and also the first annual report of the directors, which stated that the board were pleased to be able to meet their fellow-shareholders with the announcement that not only had the property been acquired for a sum much lower than was previously contemplated to be paid by the agreement made in June, 1878, for the purchase of the mines; but owing to the action of the lessor, who determined the original lease and re-took possession, the managing director was able to negociate for a new lease (now in the hands of the board) for a term of 21 years from Christmas, 1879. The directors were to some extent disappointed at not being able to show a profit on the working, but it must be remembered that the past year had been one of the very worst in the metal market for over 20 years, and that the business of the company had been carried on during a term of almost unexampled depression in the price of lead ores. They considered, therefore, that the amount of loss made since the acquisition of the mines in June, 1878, was remarkably small. The sale of lead ore since that date, amounting to 780 tons, for 7432*l.*, giving an average of 9*l.* 10s. 6d. per ton, the lowest price being in July, 1879, when 45 tons were sold for 8*l.* 3s. 6d. per ton, whilst the price now obtainable for the same class of ore was over 13*l.* per ton, so that had the latter amount been received as an average instead of the former, the small loss would have been converted into a comparatively large profit, and there would then have been no necessity to issue any more shares. The directors accordingly congratulated the shareholders upon being in possession of a property of such magnitude at the extremely low price paid for the Dyliffe Mines. The amount of work executed by the company was set forth in the report of Capt. Dean of Jan. 19. The cost of the new drivings, &c., amounted to 984*l.*, much of this being for work which should have been executed by the old company. The directors proposed to at once commence sinking the Llechwedd-du engine-shaft an extra 20 fms., as recommended in the report, so as to open out a large additional space of ore, and as soon as fresh capital is subscribed, to operate on the New Dyliffe lode, but the latter work should not be commenced until the directors were able to carry it out vigorously, as a number of extra miners would have to be employed, and the board did not feel justified in recommending this with the limited means at present at their disposal, but they trusted soon to be in a position to start this work, as the effect would be to very considerably increase the returns of ore, and thus enhance the value of the property. The directors trust that the present year will show very much better prices for lead ores, and that at the next meeting of the company they will be able to report a revival of the prosperous times enjoyed by "Bright and Cobden's Company," who formerly worked the mines. He (the Chairman) went on to say that the report explained itself, and he really had not much to add to it. He would now read the report of Capt. Dean, dated Jan. 19, which, after giving a graphic description of the state of the mines just prior to August, 1878, proceeds as follows:—

In addition to these serious drawbacks at the outset to the interests and prosperity of the company, we have had during the last year to pass through a time of severe depression in the metal market, the prices of lead ore in July of last year being the lowest realised at these mines for over 20 years, so that the difficulties we have had to contend with have been neither few nor small. We have, however, by reducing working expenses, and economising in every way possible, been able to weather through thus far; and, considering the extraordinary circumstances under which we have had to labour, have done a fair amount of work in opening out the mine, as the following list will show:—

Llechwedd-du—Bradford Shaft: We have drained the mine and put the shaft in thorough repair from the 105 down to the 125, and cleared and timbered the 125 east 30 fms., the 125 east 60 fms., and driven 11 fms. of a cross-cut from the end of the latter to reach the main part of the lode standing south, and driven on the course of the lode 29 fms. 4 ft. 8 in. We have also driven the 125, west of shaft, 14 fms. 5 ft. The 105 east has been extended 4 fms. 3 ft. 6 in., and Alfred's winze has been sunk from the 105 down to the 125. The 115, east of Alfred's winze, has been driven 17 fms. 5 ft. 9 in. Over the 95, east of Eben's winze, we have sunk 4 fms. 2 ft. 9 in. to communicate with the 95, in order to reach a large piece of ore ground which is now being worked.

Engine-Shaft: The 105 east has been cleared and timbered for a length of 20 fms., and the level driven 5 fms. 3 ft. 3 in. At the 95 east we have put a rise up through to the 85 for ventilation and opening out new ground. Stopes have been commenced over the 115, east of Alfred's winze, and over the 195, east of engine-shaft.

Dyliffe: We have sunk 2 fms. in the bottom of the 65, east of boundary shaft, and have driven the 25 east 4 fms. 2 ft. We have also driven intermediate levels in various parts of the mine to the extent of 23 fms. 3 ft. 3 in. We must not, however, shut our eyes to the fact that the amount of work done, as shown above, is very inadequate for such an extensive mine, and one of the first things required is that we should have a larger number of men at work opening out the different parts. The most important point is undoubtedly the New Dyliffe lode It is hardly possible to form a proper idea of the value and importance of this lode until we take into consideration the fact that it runs between and nearly parallel with Dyliffe and Llechwedd-du lodes, and while the two latter have been worked for generations, the new lode has been standing there untouched until we sunk a trial winze, which is now down about 14 fms., and from what has been seen of it there is every reason to believe that it contains as much mineral as Dyliffe or Llechwedd-du ever did. The sinking of this winze ought to be resumed, and a cross-cut driven from the 30 at Llechwedd-du to meet it. Levels could then be driven on the course of the lode and ground opened out for stoping.

The Llechweddu-du engine-shaft ought to be sunk an additional 20 fms., one of our chief points in opening out at present is the 125, driving west of Bradford's shaft; this is being driven to meet runs of ore ground going down in the bottom of the 105, east of engine-shaft. Llechwedd-du lode has never been found west of the junction with Esgairgaled lode, though many attempts have been made to discover it; we have commenced driving on what after a careful survey we conceive to be the Llechwedd-du lode, though very small after its contact with Esgairgaled. Should this prove to be the case it is very probable that we shall open out a new field of mineral wealth, as the undeveloped ground in this

direction is very extensive. There are many other points well worthy of trials on the different lodes—in fact, few mines can show so many. Esgairgaled engine-shaft is only down to 45 fms, and very little ground has been taken away. On surface pumping, drawing, and dressing machinery are all in good working order. The severe weather has, unfortunately, hindered our dressing operations. A great deal of this may be obviated before another winter comes round by erecting new sheds over the dressing-floors.—R. DEAN (Jan. 13, 1880).

The CHAIRMAN said there had been many trials in the old company to find the junction of the two lodes, and whenever this company found it, it would be equal to the finding of another new mine. At present the board proposed to confine themselves to the sinking of the Llechwedd-du engine-shaft, and then go on to operate, as stated in the report, on the New Dyliffe lode. The report of Capt. Dean, as would be seen, contained a very exhaustive report of what had been done, of what he was now doing, and what he suggested should be done in the future. Since that report was written he had received one or two letters from Capt. Dean, which he would read:—"Intermediate level over 95, west of Bradford's shaft: The lode here is worth 1 ton of ore per fathom, and judging from appearances we confidently expect to open out a large piece of good ore ground here." And one just received:—"I have been underground everyday this week, and am pleased to say that things are looking better with us than for a long time past." He thought the shareholders would agree that those letters were very satisfactory. (Hear, hear.) After having read the report and these letters it was not necessary that he should on the present occasion say much about the condition of the mine when it was taken over. When he went down he certainly was surprised to see the way in which many things had been neglected; many things had run to seed, and, in fact, the mine wanted a deal of looking after. He went underground at once, and thoroughly inspected every point of the mine, and Capt. Dean explained the different parts, especially in the Llechwedd-du lode, from which "Bright and Cobden's Company" got so much money. There was a big slide there which had cut off the lode, and the old company did not think they would get lead on the other side, but he thought there were indications of coming upon the proper lode, and after cutting through the slide they got a nice show of lead. The miner-like way of working was to sink a winze and get to the two lower levels, which were both paying well. In other parts of the mine a great amount of deadwork had been done. The directors had laid out no less than 984*l.* in developments; in the last year they had had to go through the worst time known for many years. In July, 1879, the company sold lead ore as low as 8*l.* 3s. 6d. per ton—the same class of ore for which they were now getting from 12*l.* to 13*l.* per ton. Notwithstanding all these drawbacks the loss for the 18 months amounted to only 617*l.* The average price of the ore during that period had been 9*l.* 10s. 6d., whereas if they had got 13*l.* per ton they would have made a profit of nearly 1500*l.* upon a capital of less than 900*l.* (Hear.) He was happy to say the price of lead had gone up, and the same kind of ore was now fetching about 13*l.* Therefore, they now started with very hopeful prospects; they had a new lease for 21 years from Christmas, 1879, the price of lead had improved, and the mine was looking better at all points than for many months past. (Hear, hear.) He pointed out that this was the largest mine in Wales, except the Van, and said that it only required development to be one of the best paying concerns in the Principality. (Cheers.) In conclusion, the Chairman moved the adoption of the report and accounts.

Mr. FIELD seconded the resolution, which was put and carried.

On the motion of Mr. J. TREBLE, seconded by Mr. F. BENNETT, all the directors, including the managing director, were re-elected.——On the motion of Mr. F. BENNETT, seconded by Mr. J. TREBLE, the auditor, Mr. C. Fitch Kemp, was re-appointed.

A vote of thanks was unanimously passed to the Chairman and directors, and the meeting broke up.

GAWTON COPPER MINING COMPANY.

A general and special meeting of shareholders was held at the offices of the company, Austinfriars, on Feb. 27,—Mr. HUNTER in the chair.

Mr. JAMES HICKEY (the secretary) read the notice convening the meeting. The accounts showed that at the last meeting the debit balance was 234*l.* 12s. At that time a call of 2s. was made, which realised 355*l.* 18s. The sales of mundic realised 518*l.* 0s. 3d., and those of copper 309*l.* 16s. 10d., leaving the debit balance at the present time 19*l.* 11s. 6d. The agents' report was as follows:—

Feb. 25.—Since the last general meeting our principal operations have been conducted in driving the 117 fm. level, east of cross-cut on the south part of the lode; the part being carried in the drivage is 6 and 8 ft. wide, and in places yielding 3, 4, and 5 tons of arsenical and sulphur mundic (mixed with good quality copper ore) per fathom. Also extending the drivage, east on the same part of the lode, as described above, at the 105 fm. level, where the lode is carried 7 ft. wide, producing in places 4, 6, and 8 tons of arsenical mundic and ore per fathom; the end is now yielding 6 tons per fathom, and showing indications of improvement. The lode in the stoping ground being worked above and below the 105 fm. level is rather extensive, yielding in places 10, 12, and 15 tons of arsenical mundic and ore per fathom. The lode in the 95 fm. level, driving west of cross-cut, is 3 ft. wide, yielding 8 tons of arsenical mundic and ore per fathom. The lode in the stoping ground above and below this level is yielding 12 tons of arsenical mundic and ore per fathom. The drivages in the shallow levels have not been resumed during the past four months. Our present prospects in this mine are exceedingly cheering, having such large lodes in every drivage going east into the hill, with increasing depth as the ends advance, which only requires a very moderate capital to increase a more spirited mode of development, and erect suitable calcining ovens, calciners, &c., to separate the copper from the arsenic, and increase the value of both minerals by the much improved system of treatment in such class of minerals as this mine is so abundantly provided with, and to bring the property into a profitable and lasting condition. —GEORGE ROWE, GEORGE ROWE, jun.

The CHAIRMAN said—Gentlemen, our position is just this—that we are now, according to the accounts, making a small profit, and if everything had been added to the present date, with what produce we have already upon the property unsold, we should, charging the costs up to to-morrow, Feb. 28, have made something like a profit of 300*l.*, as we have in stock about 850*l.* worth of copper and mundic, which is not credited in these accounts. We have not been in such a position for many years, and under these circumstances I have great pleasure in moving that the accounts, with the agents' report now read, be received and passed, and a copy forwarded to each adventurer.

Mr. MCCALLAN seconded the motion.

A SHAREHOLDER: Are we 300*l.* to the good instead of having to make a call?

The CHAIRMAN: Yes, after charging every liability to Saturday. There is no need to make a call.

Mr. BATTERS: You commenced four months ago with a debit balance of 234*l.* You have made a call which came to 355*l.*, and at the present moment your financial statement shows a debit balance of 19*l.* 11s. 6d., but if you were to bring your accounts down to the present time, and reckon the wages up to to-morrow, and taking as an asset against that the value of the ores on the floors, you would stand 300*l.* to the good. Capt. Rowe says that he has 850*l.* worth of ores prepared and ready for the market, but not yet sold, against which you simply have a debit of 19*l.* and two months' costs up to to-morrow, which would leave you with 300*l.* to the good, so that financially you are really in a good state, and there is no necessity for making a call. Hence we may pass on to the subject for which we are principally brought here—to consider the desirability of transferring this into a limited company.——The meeting was then made special for that purpose.

A SHAREHOLDER: We are really in a better position than we have been in for five or six years.——The CHAIRMAN: That is certainly so. If we had done three or four years ago what we propose to do now, we should have been making profits long ago.

Capt. ROWE said the fresh capital was wanted to put up arsenic works so as to sell the produce at a very much better price. Instead of selling the arsenical mundic for 1*l.* they would be selling it for 3*l.* a ton.

The CHAIRMAN: A circular was written by our secretary which intimated the nature of the change, and we asked a few of the largest shareholders to meet the committee to confer with them upon the propriety of bringing the company under the Joint-Stock Companies Act. There appeared to be so many reasons in favour of doing so that there was but one feeling in favour of it. The first object to be obtained is at once to get a sufficient amount of capital to put up such arsenical works as may be needed, so that they may be erected with as little delay as possible; and, then, there seems to be a strong feeling growing up in the public mind that they would like to have their liability limited, and as Gawton has arrived at the position of paying its costs, the committee thought in the interests of the shareholders the easiest way of putting us into early profits would be by this conversion. It is proposed that the resolutions unanimously passed at the preliminary meeting be submitted to-day, by which each shareholder will have three shares for one, and have 30s. per share credited as paid thereon. He then read the circular as to what took place, but this has already appeared. In response to this, continued the Chairman, the secretary has received proxies, so that we have represented here to-day about 3000 shares out of 4000,——Mr. MCCALLAN: How many are you obliged to have?——The CHAIRMAN: Three-fourths.

The following resolutions were then submitted, and carried unanimously:—That these mines be reconstituted under the Limited Liability Acts, and that the committee be and are hereby authorised to take such measures as may be necessary to carry the same into effect. That for the purposes of such reconstitution and registration, the capital of the company shall be deemed to be fixed at 24,000*l.*, divided into 12,000 shares of 2*l.* each, credited with 1*l.* 10s. per share as paid up upon each share.

A discussion then ensued, in which Mr. Batters, Mr. Bawden, Mr. McCallan, and other gentlemen took part, all being favourable to the conversion of the company into one with limited liability.——In the result it was decided to call a meeting within a month to take all the needful steps.

The meeting closed in the usual way.

WEST TOLGUS.—At the meeting on Tuesday (Mr. R. Taylor in the chair) the accounts showed a profit on the two months' working of 96*l.* 19s. 10d., increasing the credit balance 1529*l.* 0s. 5d. Nearly 500 tons of copper ore were sold in the two months. The agents reported upon the various points of operation, and stated that there are 14 pitches working by 30 men, at an average tribute of 9s in 1*l.* The sales of ore for the next meeting will realise (lord's dues deducted) 2834*l.* 16s. 5d., which will about cover costs. The Chairman congratulated the shareholders on the report being brighter than the previous one presented four months ago. The discovery made west of Richards's shaft was one they had long been looking for. He could assure the adventurers that the ground would be worked effectually; but they could not do everything at once, nor must they do more than they could afford to. It was only a very short time since that they had made this discovery, which had directed so much attention to that part of the mine; and he did not think it could be said that there had been much delay in trying it. Their great object had been to get the levels, above and below, as forward as possible; the cross-cutting they could do afterwards. So far as he was personally concerned he was quite willing to adopt any practical suggestion or recommendation that might come from the adventurers, and he (the Chairman) saw no objection to a cross-cut being driven from the 65 fathom level provided that it could be done without any hindrance to the other workings. Their costs would be somewhat increased by replacing the present defective piston-rod at Taylor's shaft-engine. In case they should have a wet spring, and it should be necessary for the engine to do more work than at present, it would be attended with very great risk. The cost of replacing the piston and rod would not be very large, but there would necessarily be some delay while that work was going on, and their returns would be interfered with to that extent. Under these circumstances he thought it was better not to pay any dividend at present. He believed there was some adventurers who desired that a dividend should be paid, but with the prospect of this outlay before them he was sure they would see the undesirability of doing anything in that direction just at present.

FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY.

A special general meeting of shareholders was held at the offices of the company, Gresham House, on Tuesday (Mr. T. E. FOAKES in the chair), for the purpose of confirming the subjoined resolution, which was passed unanimously at a special meeting of shareholders held on Feb. 12 last, namely—"That the capital of the company be increased by the creation of 5000 shares of the company of 2*l.* each, of which not more than 2750 be issued without the sanction of a general meeting of the shareholders. The 2750 shares to be issued to the shareholders *pro rata* at 15s. prem."

Mr. J. JAMESON TRURAN (the secretary) read the notice calling the meeting.

The CHAIRMAN said the meeting was aware that under the Articles of Association the directors were bound to issue the shares rateably amongst the shareholders, and the board proposed, as the shares were not divisable according to the Articles of Association, to give to every holder of 20 shares one of these shares at that premium. He should have liked to have given every shareholder an interest in the new issue, but that was not possible, as the directors could not travel out of the Articles. If there were by any chance any of these shares not taken up by persons holding 20 shares (such as trustees, executors, and others) then the directors proposed to distribute the shares amongst those shareholders who held 15 shares, and if the holders of 15 shares did not take them all up then they would be distributed amongst the holders of 10 shares, but he did not think there was much chance that any below the holders of 15 shares would have a chance of getting any of the new shares. Those who held less than 20 shares must look at it in this light—they must consider that there was a premium of 2000*l.* paid by those who took up the shares, and, therefore, would derive a benefit, for the directors could appropriate all the money received in the six months to dividend. In conclusion, the Chairman moved the confirmation of the resolution given above.——Mr. BAXTER seconded the resolution, which was put and carried.

The CHAIRMAN said the December letters had just come in from the mining captain, and also from Mr. White, who in his letters commented upon those of the mining captain. He would read the most important and interesting extracts from those letters:—

The reports from the mine, the latest date being Jan 16, are most satisfactory, everyone of the company's mines showing marked improvement. The Salada cablegram of Feb. 3 is confirmed. Mr. White reports that the lode has been cut in the deep cross-cut—that it fills the whole of the forebreast—that the whole of the lode has not yet been cut through (it appears to be over 6 ft., in thickness), that careful trials show that the lowest part of the lode yet reached is excessively rich, 25 lbs. of mineral having produced $4 (16s.) worth of gold, or at the rate of over $320 (64*l.*) per ton. Mr. White adds that this result is not likely to be due to chance, the mineral being of splendid quality, that the pyrites and galena were good, and after being freed from the free gold yielded a large amount by amalgamation. Mr. White further reports that it will be difficult in a few months time to choose between the Salada, Silencio, and Palmichala Mines, except that the Salada possesses the great advantage of being worked by an adit level commanding an immense body of mineral. The lodes in the deepest shafts of the Silencio and and Palmichala Mines continue rich in depth, and in Palmichala Mr. White states that the samples taken from the sole of the end of the 56 ft. level surpass for richness and excellent quality of mineral anything he has seen in the company's mines. The lode in the Cecilia Mine is widening and rapidly increasing in value as it goes down. The V. R. Mine began to work in January, and would give good produce, all the richest mineral coming from the deepest workings. Nothing is said by Mr. White about the rumoured revolution.

A SHAREHOLDER asked what was the distance between the different mines?——The CHAIRMAN said he could not give the exact distance, but one could go round them all in a couple of days. The only drop in their cup of joy were the rumours of a revolution in that country. He did not attach much importance to those rumours, nor did Messrs. Steibel, the agents in England of the bankers, attach much importance to it. In the opinion of the directors the mines never looked so well as at present, and he believed that in the Frontino and Bolivia they had a second St. John del Rey.

Mr. ATKINS proposed a vote of thanks to the Chairman and directors for the able way in which they were carrying out their duties. They were all looking forward to something good in the future. They had been patient for some years, hoping for something good, and from what they had heard and seen during the past few months it really did appear that at last there was a fair prospect of reaping an excellent reward for their patience.

Mr. HEATH seconded the resolution, which was put and carried.

The CHAIRMAN, in acknowledging the compliment, said he fully agreed with the proposer of the resolution that there really did appear a near prospect of the shareholders being richly rewarded for their patience. There was every reason to hope that in a month or two remittances would be received of 150 lbs. or 200 lbs. of gold per month, which would yield about 2450*l.* profit, or a monthly dividend of 1s. per share. The present cost was high, as they were doing no stoping, but when they commenced stoping they would get the mineral out at about one-third the cost. Four or five years ago shares of this company were offered to him at 4d. per share. Mr. Baxter had paid out one winding-up order, and he (the Chairman) became personally responsible for an advance of 2000*l.*, and, therefore, the shareholders had good reason to congratulate themselves upon the greatly improved position and prospects of the company.

The meeting then broke up.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

March 4.—Reports from the lead districts are to the effect that there has been no change at any of the mines, work going on as usual at most of them. Singular to say, there was an advertisement in one of the Sheffield papers yesterday from some one wanting to purchase some shares in the Eyam Mining Company, thus showing that some person has great faith in it. Of the few companies working lead mines in Derbyshire the shares are seldom quoted; but the Eyam Mine, from which 198 tons of ore were raised in 1878, has since then, I believe, been more extensively opened out, and some more plant put down, so that it is likely to be in an improving state. However, it appears that one firm raises nearly as much as all the others put together. There does not appear to be any new ventures on the *tapis*, for capitalists do not appear to like the Derbyshire field for lead; and no doubt many who have done so are satisfied with the first loss. Plentiful as ironstone is in the county, yet a comparatively small quantity is being raised, so that a large quantity continues to be imported from Wellingborough and other parts of Northamptonshire to the various works. In coal, however, it is different, and colliery owners have been doing well for some time so far as the demand is concerned, but they are obliged to sell at a very low figure, which must leave most of them the barest profit possible, whilst in some instances there must be none whatever. A large tonnage of house coal is being sent to the Metropolis from Clay Cross, Blackwell, and other of the leading collieries, whilst a good deal is also being forwarded in an eastern direction. Steam coal does not go off any better than it did, most of what is absorbed being by the furnaces and the railway companies. Gas coal has been sent away in considerable quantities in the carrying out of contracts, but the tonnage required by the gas companies is now beginning to taper off. The Iron Trade keeps up well, but there is not now that eagerness to purchase that there was a few weeks since, whilst prices have also a downward tendency. Some of the foundries are now better off, some heavy orders having come from abroad that in one instance, at least, will take some time in completing.

In Sheffield trade appears to have settled down into the ordinary groove, there being nothing like excitement with respect to raw iron, as consumers are inclined to hold back from purchasing for forward delivery, in expectation that prices will come down. Mill material of every description, including ship-plates, sheets, heavy plates, bars, and wire, is in good request, whilst the steel rail trade is as active as ever. America continues to send good orders for cutlery and steel, whilst transactions with the colonies are kept up to the average of the year. Tyres and axles are in fair request, and an increased business is being done in crucible steel. The foundries are now better off than they have been for some time, and the same may be said as regards engineers and mechanists, who last year had a very hard time of it. At the collieries in South Yorkshire a steady business is being done in house coal to London and the South, but owners still complains of the low prices at which they are obliged to sell owing to the competition. Steam coal is slightly better than it was, but there is great room for improvement both in the demand and the price. Shipments of coal of late from Hull and Goole contrast favourably with those for the corresponding period of last year, but there has not been much change as regards Grimsby, to which a good deal of coal is sent from South Yorkshire.

The Clay Cross Company have a number of pits at work, but it appears not sufficient for their requirements, so they are now sinking another colliery on the Wingerworth estate close to the Midland Railway.

In the Leeds district the forges as a rule are not working full time, but from enquiries now being made a change for the better is looked forward to. In locomotive engines the works are going along satisfactorily, and are likely to do so for some time, fresh orders being expected. The rolling-mills have been working tolerably well, so have tool and machine makers. The production of pig at the various works is well kept up, as well as of malleable iron. The collieries outside the town, as well as those in the Normanton district, have been kept well going, whilst rather more has been recently done in steam qualities, but without any advance in price.

REPORT FROM CORNWALL.

March 4.—Since our last the anticipated drop in the tin standard, which had been expected but delayed in the week previous, has taken place. Since, however, it is only a drop of 2s. instead of the generally feared 3s., and since the long period, comparatively, over which it impended, enabled its effects to be pretty liberally discounted, the immediate effect curiously but naturally enough, in the county, was rather to harden prices than to depress them, and since then there has been in most cases a direct upward tendency. The general idea is still in favour of considerably enhanced prices before a very long time, and Capt. Boyns the other day at North Levant expressed his conviction that between this and midsummer he was likely to get something like 70*l.* for the remainder of the stocked tin at Wheal Owles. At any rate, he should not sell under 63*l.*, and he did not believe he should let any go under 65*l.* There is really no reason to doubt that the slight retrograde movement is due solely to the action of speculators upon a market which has advanced slightly beyond the improvement in trade. We have said so before, but there are so many effects to discount the true facts that they need again and again to be insisted on.

A handsome grant of 100*l.* a year for three years has been made to the Miners' Association by the City of London Guild Association for technical education, &c. It could not come out better hands, and is sure to be largely fruitful of results.

The Mining Institute has been the means of bringing another valuable and practical paper before the miners of this county. At the meeting on Tuesday last Dr. Forbes, on behalf of Capt. J. N. Doble read a paper "On the Treatment of Silver Ores of Low Percentage by the Wet Process." Capt. Doble has carried out his process at Harrowbarrow on burrows which contained on an average 8 ozs. of silver to the ton, and with the result that the return just met the cost; and this quantity Mr. Simmons, who had considerable experience at New Consols, considers a good average for the county, while he holds that under the wet process it will pay to work ore which contains only 1½ per cent. of copper. We have very little doubt that ere long the wet process of dressing will establish itself in the county, although hitherto all efforts made in that direction have been more or less unfortunate, and the reading of Capt. Doble's suggestive paper is not one of the least means to that end. But the wet process will never answer in Cornwall until it can have a fair trial on its own merits, and freed from all external financial entanglements. Capt. Doble's method of treatment is a modification of the chlorine process, and, of course, has to be carried out in a thoroughly scientific fashion, as being in the main a matter of strictly chemical operation. There is no question that Cornwall contains immense stores of wealth at present cumbering the surface in the shape of waste, and only waiting for wise and skilful development.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES,

March 4.—The Alexandra (Newport) Dock Company continues to go on and prosper. At the last meeting of this company, not only was the interest on the preference shares paid, but the original shareholders received 1½ per cent. on their holdings. Seeing that when the project for constructing the dock was mooted it was predicted that it would be a fair lure, the report just presented cannot but be deemed an eminently satisfactory one. No less than 7000*l.* is carried to the reserve fund. It may be added that the dock was never so full of vessels; they are lying three and four abreast by the quay-walls, and many have been turned away for want of berthing-room. This augurs well for the future success of the undertaking. Next week—on March 11—the new station at Newport is to opened. The Great Western Company intend to amalgamate there the passenger traffic of their own line with that of the Monmouthshire, Brecon, and Merthyr, &c. A grand banquet is to be held in celebration of the event, at which some 250 gentlemen will be present. At the Pentre Police Court a timberman, named David Evans, was charged with opening his safety-lamp beyond the lamp-station in No. 2 pit, Ferndale. The offence, of course, is a very dangerous one, and defendant was fined 40s. and costs, a light penalty in comparison with his offence it must be admitted. An explosion of fire-damp has occurred near Pontypool, by which two men have been badly burnt. It was in one of the sinking pits at Cwmnantddu.

To turn to the staple trades of the district, reference must first be made to iron. This industry has been again active during the past few days, and never have clearances been larger. The American demand has been fully up to the average, but there are also requirements in hand for India, Brazil, and a small order for a Sardinian railway. By far the largest proportion of clearances has been made to the United States, which continues a good customer. Prices for finished iron have not risen, and have been firm. Steel does not seem to be in quite such good demand. Rails are in fair request, principally on American and Indian account. The bar department is moderately active, and what pig-iron is not absorbed at the works finds a ready sale. One great feature in the trade is the demand which exists for scrap iron, old rails, and other old materials. These are picked up as chances offer, and fetch high—almost fabnlous—prices. The quantity of iron ore arriving at the local ports is very arge; for instance, on Monday last no less than 20 vessels werer eported at Newport Custom House from Spain, carrying 12,000 tonsl of ore. From a return published it appears that out of 120 Bessemer converters in Great Britain only 14 are in Wales. Evidently there is room for an extension of steel making in the Principality. At the Treforest Works the erection of a new blast-furnace has been commenced; this, when completed, it is said will be the largest in the district. At the Crumlin Viaduct Works orders are said to be now plentiful. An advance of wages has been made at Briton Ferry Ironworks. The Tin-plate Trade has been moderately active. Prices are unaltered, but firm. The coal industry has been moderately active, and the stormy weather has to a great extent impeded the movement of vessels. With few exceptions the sliding-scale arrangement appears to work well. A section of the house coal men of Monmouthshire, however, seem to be discontented. There can no change be noted in quotations, which, however, are firm, with a rather upward tendency. The steam coal trade has been brisk on foreign account. House qualities are about as active as usual Colliery proprietors refuse still to accept orders to any extent for forward delivery at present rates. The patent fuel department is rather more active; orders are more plentiful, but recent low prices prevail. Coke sells at high quotations for best qualities.

SALE OF COLLIERIES.—At the Royal Hotel, Cardiff, on Thursday, Messrs. Stephenson, Alexander, and Co. offered for sale the Llanelly Collieries, situated near the Great Western Railway station at Llantrisant, with which railway they are connected by suitable sidings. The property includes about 300 acres of ground. The minerals have only recently been taken, but the shafts are sunk to the best seams, and the coal is said to be specially adapted for coking purposes. With the 300 acres of minerals, about four acres of the surface have been leased, and on it 33 cottages erected. The minerals have been leased for 60 years, and the surface for 99 years, from January, 1872. The property is leased at a reasonable dead rent, and the royalties are said to be low. The property was formerly in the hands of a Middlesborough company, who had spent a large sum of money in providing machinery of the best kind for a much larger output than is got at present, and the buildings said to be substantial and well fitted. The cottages were built at a cost of 5000*l.* After some delay, Mr. Crewdson, of the firm of Crewdson and Wakeford, bankers, Kendal, Westmoreland, acting, it is said, on behalf of

a gentleman, offered 28,000*l.* for the whole, at which price the property was knocked down to him.

The case "Harries Navigation Colliery Company, appellants, against the churchwardens of Merthyr Tydvil, respondents," was argued many months ago before the Common Pleas Division of the High Court of Justice, but the Court had reserved its judgement, which was delivered on Friday, and the appeal was confirmed with costs. The counsel for the respondents asked leave to carry the case before the Appellate Division, but leave was refused. The solicitors for the appellants were Messrs. Simons and Plews, of Merthyr; counsel, Mr. Herschell, Q.C., and Mr. Sanderson Tennant; for the respondents, Messrs. James, of Merthyr, and counsel, Mr. Webster, Q.C., and Mr. Hughes. The case is one of considerable importance in the coal fields of the kingdom. Mr. Hedley, when he was re-valuing the properties in the county for the purpose of local rating, had valued the incomplete shafts and the machinery and structures at places where new sinkings were going on at very considerable sums. Among these new works was Harries Navigation Colliery, in the parish of Merthyr Tydvil, where the sinking had occupied seven years, the coal only being won last year. Mr. Hedley valued these works while the sinking was going on at 480*l.* a year. The proprietors appealed against this valuation, contending that they were, until the coal was won, only liable to assessment on the agricultural value of the land, which was agreed to be 34*l.* a year. The outlay in opening the works has amounted to nearly 300,000*l.*, and it might be that even after that enormous expenditure the coal might prove to be out of condition and valueless, and it was contended that consequently there was no utilised property that could be let to a tenant or which could be utilised to any pecuniary advantage until the coal was won. The contention on the part of the parish was that the surface structures, machinery, buildings, and conveniences were of present value, inasmuch as they could be let to a contractor at a rent, for the purpose of his carrying on the sinking; but the Court refused to adopt this contention, and supported the principle of a case of the Tyne Company (Limited) and the parish of Wallsend, where it was held that while a colliery was drowned out and unproductive the machinery and buildings used only in an endeavour to pump out the water were not assessable. It may be now taken that capitalists investing scores and hundreds of thousands of pounds in opening a colliery are not liable to assessment on the engine-houses, offices, buildings, and works necessary for the purposes of the sinking before the coal is won, and that the only rateable value in the meantime is the agricultural rent which might be received for the surface over which the erections and structures extended.

In the High Court of Justice, Chancery Division, on Saturday, before the Master of the Rolls, *in re* the Elgar Silver-Lead Mining Company (Limited), a petition was presented by Mr. George Green, C.E., and machine manufacturer, of Aberystwith, Cardiganshire, for the winding-up of the company. The amount of the debt was 199*l.* 2s. 1d., and 42*l.* 2s. 2d. interest thereon, for machinery supplied to the company for the working of the mine, which was situated at Llanfihangel, Cardiganshire. The company was registered in July, 1873, with a capital of 20,000*l.* in 1*l.* shares, 13,768 of which had been fully paid-up. The company was at present unable to meet its liabilities. There was no appearance on behalf of the company, and the Master of the Rolls made the order as prayed, the order not to be drawn up for a month.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

March 4.—The Cannock Chase coalmasters have issued circulars announcing a reduction of 2s. per ton (to take effect at once) in the price of best coal, and of 1s. per ton in second qualities; this makes best coal 10s. per ton; colliers' wages fall 3d. per day, or stint. The reduction was made because the demand for house coal began to decline soon after the last rise, and it continued to decline until a week or two ago; the leading collieries were doing scarcely anything except in furnace coal. The wisdom of the step now taken is seen in the circumstance that orders are coming in well, and the machinery at the pits is already more active than it has been for some time past. Prices of coal in the South Staffordshire district proper keep up; still they are weakened by the action of the Cannock Chase people. The colliers continue to agitate the question of an alteration in the sliding scale which regulates wages. At a meeting of delegates, held at Dudley on Wednesday, it was decided to hold a conference upon the subject early next month, at which all the collieries are to be represented.

The chief feature in the iron trade this week is the introduction into this district of hematites, the product of the Llynvi and Tondu furnaces. The company have just began their manufacture, mainly from Spanish ores, and with the special object of competing with the hematites of the Tredegar Iron Company. The quality of the new hematite, the agent asserts, is equal to that of the Tredegar brand, while his price on 'Change yesterday in Wolverhampton and to-day in Birmingham was 10s. below that at which the agent of the Tredegar Company was authorised to sell. Llynvi hematites were 6*l.* 10s., and Tredegar 7*l.*; trial lots of the former might here and there have been had at 6*l.* Some Ulverstone hematites were down 10s. upon former quotations, the makers freely offering to accept 6*l.* There is no change in the condition of the native pig-iron trade. Finished iron-makers keep busy on old orders; new contracts hang fire, for many buyers are evidently looking for lower prices. The opinion that prices will come down much is not, however, at all general.

Much satisfaction is occasioned this week by the information that the Hamstead Colliery Company have at a depth of 573 yards now come down upon the Brooch coal, of a thickness of 3 feet. The measures lie very uniformally across the shaft, with a gentle dip of 1 in 16 to the south-east. The sinkers hope that in about five weeks' time the Thick coal will be found.

The Mines Drainage Commissioners, at their meeting in Wolverhampton, on Wednesday, discussed the scheme for the proposed amalgamation of the Bilston and Tipton districts. They had before them to aid their deliberations a report of the arbitrators upon mines drainage in the Bilston district, which propounded a plan for draining that district, irrespective of any junction with Tipton. The report set it down that the total net outlay needed to do this work would be 25,530*l.*, and that the annual cost of keeping down the water would be 13*l.* The quantity of mineral which would be available for working if the scheme were carried the report estimated at 11,000,000 tons. At the meeting this estimate was shown to be far too low, and the opposers of the scheme contended that the cost had been greatly underrated. When the Act was applied for, in 1873, the estimate was that 68,000,000 tons of coal remained ungotten, and 10,000,000 tons of ironstone. It was resolved that the scheme should be jointly discussed by the Bilston and Tipton committees, and that its further consideration by the Commissioners should be adjourned for a month.

At Wednesbury an order has been received for bridge and girder work for Afghanistan of so extensive a character that it will give employment to 1000 men for the next six months.

REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

March 3.—I do not wish to be understood as speaking depreciatingly of the Llanarmon district as a field for lead mining, but only as giving, as an impartial outsider, a few words of caution to those who propose to conduct mining operations there, as well as the financial matters connected therewith. Nor am I so much of an outsider as not to be acquainted with the capabilities of the district, and with the respective merits of the east and west side of the limestone belt with its overlying beds. The same words of caution may be needful with respect to revived copper mining operations in Carnarvonshire. There are good well defined lodes, which will yield up to a certain amount. Considerable activity is discernible in the reconstruction of mining companies in Wales. I hope the movement in Aberdaunant will lead to the success long hoped for. Referring to the Llangynog district, which I mentioned last week, it is said that one of the old mines which was successfully worked many years ago is to be reopened, and its workings extended and deepened.

Although working fairly, the collieries of the district cannot be said to be pressed with orders. The demand for house coal has slackened, and some difficulty is experienced in maintaining the recent advance in prices. This is the more unsatisfactory inasmuch as several collieries having lately stopped working it was hoped that more trade would be thrown into the hands of those still in work. A large quantity of Lancashire and Staffordshire coal is brought into the district favoured by the easy rates granted by the London and North-Western Railway Company, and until this coal is kept back by an increased demand in those counties the North Wales coalowners must, as a matter of course, suffer, as far as the home trade is concerned, by the competition.

Two rock-drills, an Ingersoll and an Eclipse, have been working alternately at the new Crickheath Lead Mine, near Llanymynch, for some time past. The average driving in limestone rock and tough shales has been 40 yards per four weeks, working night and day. It may be useful if, with the permission of the engineer, Mr. Henderson, I place on record the particulars of costs, which are as follows:—Two enginemen, at 3s. 6d. per day, 8*l.* 8s.; two drillmen, at 3s. 6d. per day, 8*l.* 8s.; two drill tenders, at 3s. 2d. per day, 7*l.* 12s.; four tillers and labourers, at 3s. per day, 14*l.* 8s.; one man and pony, at 6s. per day, 7*l.* 4s.; one boy, at 1s. 6d. per day, 1*l.* 16s.; one outside man, at 3s. per day, 3*l.* 12s.; one overman, who is also smith, carpenter, fitter, &c., at 6s. 8d. per day, 8*l.*; coal, 17*l.*; fuze, explosives, caps, detonators, steel, candles, and stores generally, 50*l.*: total, 126*l.* 8s., or 3*l.* 3s. 2½d. per yard. The price formerly paid for driving in the limestone by hand was from 6*l.* 10s. to 7*l.* per yard.

Machine rock-drills are now doing good work at the Roman Gravels Mine, the Park Mines, near Wrexham, the North Hendre Mine, and at Halkyn Deep Drainage Level. The Bill for supplying Liverpool with water from the Vyrnwy, above Llanwyddyn, has been read a second time, and referred to a committee of nine members of the House. Mr. Reginald York spoke truly when he said that the opposition to the Bill in the Severn Valley was nothing like unanimous. It is to be hoped that this scheme for Liverpool, and the Thirlmere scheme for Manchester, may inaugurate a great national scheme of water supply from the river heads and mountains districts of the country. It is monstrous that the great towns on a river's banks should go on, as the Metropolis, for example, does, drinking the diluted sewage of the towns higher up the streams.

TRADE OF THE TYNE AND WEAR.

March 3.—The shipments of coal in these rivers lately have been rather light, partly owing to the occurrence of very inclement weather in the North Seas, but there has been some improvement during the past week. The imports have also been rather light. The operations at the Northumberland steam coal works have been retarded owing to the detention of steamers, but it is expected that they will now be in full work to the end of the week; there are enough orders on the books to keep most of them in full employment for some time. The gas and coking coal works in Durham are fully employed, and all the high class works have made contracts which will keep them fully employed most of the present year. The Redheugh Colliery, which has been closed 18 months, was re-opened on Monday. A good house coal is produced here from the Beaumont seam, and it is sold in Newcastle and Gateshead. There are also other good seams at the colliery for coking and gas coal as yet unworked, and it is expected now that the coal trade has revived these seams will be got into operation and a large number of men be employed. There are still several collieries in the district closed, but is expected that some of them will be opened again shortly. The iron trade continues to improve in all branches; the pig-iron trade continues firm, with an upward tendency in prices, and furnaces are being blown in in Cleveland and other parts of the district. At Seaham Harbour the furnaces which have been out for a long period are to be blown in immediately. The finished iron trade continues to improve, and many branches which were at a low ebb have revived considerably. The rail trade and other branches which were considered to be almost superseded by steel are now pretty brisk; there is also a good business in angles and other branches of work for shipbuilding. This increased demand for good iron, and the advance in the price of steel, have for the moment arrested the progress of steel making for many purposes instead of iron; but there is no doubt that this movement will still continue to progress, although the change may not be so rapid as was at one time expected. The hematite pig-iron trade on the West Coast is very brisk in the North Lancashire and Cumberland district; 63 out of 89 furnaces are in blast, and in a short time eight others will be blown in at Barrow, Cleator, and other places.

An immense stock of hematite iron ore is held at the works of Sir W. Armstrong at Elswick, and there is also a large stock of pig-iron, but that is being reduced gradually; some large cargoes of this iron have been shipped there lately, as vessels can pass through the swing-bridge at Newcastle up to the wharf at Elswick. The Ridsdale Iron and Coal Works, which have been worked some time by Sir Wm. Armstrong and Co., are now permanently closed, and the engines and general plant are to be sold this week. Iron ore of a very high class was worked here, but the cost of working was excessive, and as there is a good supply of Spanish and other ores to be had this firm after a long trial have decided to close the works. Coal was also worked here, but the seams were thin, and although much expense was incurred in sinking and exploring the Plashetts seam, which is of considerable section, could not be found. No doubt the failure is owing to the disturbed state of the strata, several faults having been found to pass through the property.

The revival of the coal, iron, and other staple trades of the district is clearly shown by the traffic returns of the North-Eastern Railway Company for the week ending Feb. 28. There is an increase of 15,950*l.*, as compared with the corresponding period of 1879, the increase of the preceding week having been 12,232*l.* All departments have participated in the increase.

The Cleveland ironmasters' returns for February show a large production of pig-iron, the whole make being about 182,000 tons, of which 148,000 tons were Cleveland iron, and the rest hematite and other kinds. There is an increase of the exports to foreign ports of about 15,000 tons as compared with February last year. There is a reduction in the stocks of about 10,000 tons. The furnaces in blast are 103, compared with 99 in January.

MESSRS. BOLCKOW, VAUGHAN, AND CO. (LIMITED), MIDDLESBOROUGH.—On Wednesday the annual report and balance-sheet of this large ironmaking and manufacturing concern was issued. It is of a very gratifying character. The directors report that there is an available profit for distribution for the year ending Dcc. 31, 1879, of 161,044*l.* 14s. 2d., which they purpose to dispose of as follows:—In payment of interest on debentures, 24,059*l.* 2s. 1d.; for dividend on preference shares, 12,788*l.* 1s. 3d.; for dividend on the A and B shares of the company, at the rate of 5 per cent. per annum, 122,023*l.* 10s. 8d.; leaving a balance to be carried forward of 2463*l.* 15s. 2d. A significant paragraph in the report is as follows:—"The experiments conducted under the Thomas-Gilchrist process for making steel from Cleveland pig-iron have proved successful, and the new plant specially designed for carrying out the process is now being erected at Euston, and every effort is being made to complete the same as speedily as possible." In the meantime the steelworks are engaged to their fullest capability. The directors speak hopefully of the future of the company, and conclude by stating that resolutions for reducing the shares of the company to a reasonable denomination will shortly be submitted to an extraordinary general meeting of the shareholders. The nominal capital of the company is 3,650,000*l.* The accounts are audited by Messrs. Chadwick, Collier, and Co., Manchester. The annual general meeting is fixed for the Memorial Hall, Manchester, on the 19th inst.

NEWFOUNDLAND LAND COMPANY.—Some enquiries as to the registered offices and position of this company having been made through the *Mining Journal*, one of the directors—Mr. H. Weaver—has kindly forwarded a copy of the accounts and reports presented at the last ordinary general meeting, held in June last. The balance-sheet shows that 43,226 fully-paid 3*l.* shares were issued to the shareholders of the New York, Newfoundland, and London Telegraph Company, as per agreement of June, 1873, and that the remaining 6774 shares of the nominal capital have not been issued. To carry out further explorations in Newfoundland 3695 10 per cent. preference shares were issued, and 3411*l.* received upon them, which, with 63*l.* 3s. 6d. sundry creditors, and 825*l.* 17s. 7d. from receipts and disbursement account, makes up the 4300*l.*, 1s. 1d. cash balance. The directors reported that their "efforts towards the exploration of the company's lands having produced no tangible result, and the available assets of the company, with the exception of the small sum subscribed by the allottees of preference shares having been nearly exhausted, the directors are of opinion that the further maintenance of the company's organisation would only entail a useless and unnecessary expense, and that it would be most to the interest of the shareholders that the company should be wound up voluntarily and the lands realised by sale for the best price that can be obtained, the proceeds being distributed. Should the shareholders concur in this view the directors are of opinion that the amount paid by the allottees of preference shares should be returned, the allotments being cancelled. As they are advised that the necessary steps in this behalf must be completed before the commencement of liquidation, they convened the extraordinary general meeting, and should the contemplated resolution be passed by the requisite majority the same will be submitted for confirmation as a special resolution to a subsequent extraordinary general meeting." Mr. Weaver writes that since the date of that report the preference shareholders have been paid off. The offices of the company are at 26, Old Broad-street; Mr. Cyrus W. Field, Sir James Anderson, and Messrs. Henry Weaver, A. M. Mackay, and W. Barber, are the directors, and there are about 1300 share holders.

FOREIGN MINES.

PLACERVILLE.—Telegram from general manager, March 1: Mill and hoisting machinery working well.

PITANGUI (Gold).—Mr. T. S. Treloar (Pitangui, Jan. 17) advises that the hill water was cut in the 20 to the upper veins on Jan. 3, and the end had since been excessively heavy, notwithstanding which, however, progress was being made. This level would shortly have to be suspended, as the force will be required at the 30, where there are indications of soft ground coming in. Ere stopping the 20 it would be endeavoured to drive it into the jacotinga, now close by, before the rains, which had set in with great severity, had had time to seriously affect the work. The enlargement of the adit for siding and pass at the foot of the rise was being proceeded with. At surface the framework of the remaining half of the wash house had been put up, and it was hoped that the tile would be on, and the entire building enclosed in the course of another fornight or three weeks. Mr. Treloar's aim was to commence partial treatment of the general mineral immediately the mine works were completed, stocking the roughs caught on the screens in the new part of the wash-house, until the stamping mill is ready. Mr. Treloar forwarded the gold obtained in December, 1137·7 ozts. (137 ozs. 1 dwt.) on Jan. 6, and also some specimens from the small vein at Ouro Podre; in this amount of gold was included 3 ozs. 9 dwts. derived from sand retreated, and from two samples broken on the occasion of a visit to the establishment by some gentlemen from the Government School of Mining at Ouro Preto. The mine captain reports as follows for the month of December:—15 Fathom Level: This level has been driven this month 4 fms. 4 ft. in jacotinga for exploration; samples poor so far; there is a little water coming out of the bottom of the level, but th end is favourable for driving. On the 5th we opened a cross-cut on the right-hand side in the jacotinga, 6 ft. behind the end, for exploration, and we are driving it in the direction of the Bahu veins.* There is no water here, and the ground is favourable. This level has been extended during the month 12½ fathoms.—30 Fathom Level: On the 17th we resumed this level to drain the water from the Ouro Podre veins to this depth; the end is in hard killas at present, but in a few fathoms more driving we expect to meet with water. This level has been extended 3 fms. 4 ft.—20 Fathom Level: The water continuing just the same as it has been for some months past, we considered it advisable to come back 4 fms. behind the end in good ground, and open a level on the left-hand side to drive to the upper veins. This level was commenced on the 22nd inst., the ground being soft but favourable for driving so far. There is very little water coming out of the end now, but we are expecting to meet with more daily. This level has been driven 4 fms. At the 15, bottom of old workings, on the Ouro Podre, 14 fms. of small levels or tatoos have been driven for exploration, also a rise from the 20 cross-cut has been risen 5 fms and holed to the old workings. In one of these tatoos we have found a good auriferous vein in the clay slate; from this vein, which is from 4 to 6 ft. wide, we have broken for treatment 4½ tons; also very good samples of gold have been taken from a small rich vein in the rise; so far as we have seen of this clay or lode, it appears to be a large body of auriferous ground. The water in the adit has increased a little since the rain set in, also in the 20 and the 20 side level.—[* The Bahu veins are stated to have been left rich last century, when workings on them were suspended by water.]

TOLIMA.—Feb. 28: The Frias December profit was 1232*l.* 10s. This rather smaller output is explained by the manager as resulting from the combined effects of a stoppage for repairs, the Christmas holidays, and the disturbances induced by the recent revolutionary troubles. The manager adds that the mine has an encouraging appearance both as regards present returns and future prospects. The underground manager (Mr. J. Pryor) reports that the lode in the engine-shaft contains two branches of rich mineral, worth 2½ tons per square fathom; set at 8200 per fathom. At the Alto Gold Mine the clean-up on Dec. 22 yielded 58 ozs. 4 dwts. of amalgam on a run of 540 hours. The sluces and cuts are now more correctly graded, and he hopes future cleans-up here will be more frequent. At the south mine the clean-up on Jan. 15 gave 26 ozs. of amalgam, from 500 square feet of bed rock uncovered. The amalgam on hand up to date will be retorted, and the gold shipped to England probably by the next general mail. We are prospecting for a new section of gravel for future operations.

RUBY AND DUNDERBERG CONSOLIDATED.—Feb. 4: Dunderberg: The intermediate drift has advanced 22 ft., now in 228 ft.—no change. The cross-cut in the direction of the Home Ticket, from the 400 ft. level, hereafter to be known as the Home Ticket cross-cut, has advanced 20 ft., now in 32 ft.; the ground continues softer. What ore we have in the intermediate is broader at the top than in the bottom of the drift, which leads me to believe the ore body is above, and I have started an uprise from the 400 ft. level (two men at work) for the purpose of intersecting the fissure we are now following in the intermediate, and will cut it about 100 ft. above.—Home Ticket: Work continues as usual; some ore on hand. About 30 tons got since that, which appears in return No. 6. In the present state of the roads no ore can be shipped. The ore body has not decreased in size. Regarding the other mines, nothing new to report. The ore sold during the week amounted to about 64 tons, and realised net $1449, leaving 53 tons at the mines. The incomings from ore raised have greatly reduced the monthly expenditure.

SENTEIN.—Feb. 28: The manager reports:—The caunter lode has been driven north 3 ft. and on the south side 2 ft. 6 in. this week; I do not perceive any difference in its value since last reported on. The No. 4 end is still unproductive. We have ceased driving it for the moment, as it is possible we may find it after we have driven a little on the caunter lode to the south. Stopes of same value as usual. The winze sinking below No. 3 level is composed now principally of carbonate of lead, some specimens of which I send you to-day; it is worth fully 3 tons to the fathom. We have sunk 8 ft. during the past week. St. Barbe level has been advanced 10 ft. We have broken 80 tons of ore during the week.

ALAMILLOS.—Feb. 18: In the 20, driving west of San Felipe's shaft, the lode is not yet intersected west of the cross-course. The lode in the 100, driving east of Taylor's engine-shaft, is well defined, but it does not contain any lead ore. In the 115, driving west of Taylor's engine-shaft, the lode is large, but became poor a few days ago. The lode in the 100, driving in the same direction, contains a few spots of lead. In the 85, driving west of San Adriano shaft, there is a very promising lode, which is letting out water freely. The lode in the 60, driving east of San Victor shaft, is wider than the level, and it has somewhat improved in value, being worth ¾ ton of ore per fathom. In the 70, driving east of San Victor shaft, the lode is of no value. The 70, driving west of Judd's shaft, will soon be under Gregorio's winze, where there is a rich lode above the slide. In Taylor's engine-shaft, sinking below the 115, the men have commenced to sink in hard granite. San José shaft is being sunk below the 30 in soft ground. In Merino's winze, sinking below the 40, the lode is small and poor. The lode in Cristobal's winze, sinking below the 60, is producing good stones of ore, worth ¼ ton per fathom. In Alphonso's winze, sinking below the same level, the value of the lode has very much improved, being worth 1½ ton per fathom. Alberto's winze, sinking below the 100, has come down on water, and is suspended until drained by the level below.

LINARES.—Feb. 18: In the 115, driving east of Warne's engine-shaft, the lode is improving, being worth 1½ ton of ore per fathom. The lode in the same level, driving west of Warne's engine-shaft, is disordered and poor. In the 135, driving west of Peill's engine-shaft, the lode is small, with occasional stones of ore. The lode in the 120, driving west of Peill's engine-shaft, has declined in value. In the 105, driving west of Peill's engine-shaft, a good length of valuable lode is being driven through, worth 2 tons of lead ore per fathom. The lode in the 135, driving east of Peill's engine-shaft, has greatly improved in the past week, and produces 2 tons of ore per fathom. The 120, driving east of Peill's engine-shaft, is opening up a fine run of ore ground, worth 2 tons per fathom. The lode in the 105, driving east of San Francisco shaft, and producing 1 ton of lead ore per fathom, is small, but very compact and regular. The 232 winze, sinking below the 105, is going down in a fine shoot of ore, worth 3 tons per fathom. The new winze, No. 234, sinking below the 120, and producing 2 tons of lead ore per fathom, is situated east of Peill's engine-shaft, and in advance of the 135 end.—Quinientos Mine: The lode in the 100, driving east of Taylor's engine-shaft, is regular, and yields ¼ ton of lead ore per fathom. In the 90, driving east of Taylor's engine-shaft, the ground is hard, and the lode unproductive. The 80, driving east of San Carlo's shaft, consists of a regular and well-defined lode, containing a little ore, but not sufficient to value. The lode in the 80, driving east of western boundary, is much larger than it was, and improving in appearance. In the 55 driving east of western boundary, the lode has fallen off in value.

BUENA VENTURA.—Feb. 18: In the 25, driving east of No. 1 engine-shaft, the lode is small and poor. The driving in the 40, east of No. 1 engine-shaft, and in the same level, worth 1 ton of ore per fathom, west of No. 1 engine-shaft, has been hindered during the past fortnight, owing to our cutting into a loose open lode letting out a quantity of water, and overpowering the engine for a short time, but we are glad to say the water is now diminishing, and the mine in fork, and driving resumed. The lode in the 25, driving west of No. 2 engine-shaft, is very regular, with occasional stones of ore. In the Feliza engine-shaft we have commenced sinking below the 40 with an excellent party of shaftmen, and hope to make good progress in getting it down to the 50; the shaft is off the lode, and in hard granite. The lode in No. 2 winze, below the 10, has improved in value, being worth 1 ton of ore per fathom, but sinking is suspended for the present, owing to an increase of water.

FORTUNA.—Feb. 18: Canada Incosa: The lode in the 120, driving west of O'Shea's engine-shaft, and worth ½ ton of ore per fathom, has declined in value during the past fortnight. There is no improvement in the 50, driving west of Abercrombie's shaft. In the 60, driving west of Abercrombie's shaft, producing 1½ ton per fathom, the lode has very much improved during the past few days. The lode in the 70, driving west of San Pedro shaft, worth ½ ton of lead ore per fathom, continues rather small. In the 80, driving west of San Pedro shaft, there is a strong promising lode, producing ¾ ton per fathom. The lode in the same level, driving east of San Pedro shaft, has further improved, being worth 1½ ton per fathom. In the 70, driving east of San Pedro shaft, the lode is well defined, but does not contain enough ore to value. The lode in the 120, driving east of O'Shea's engine-shaft, is unproductive at present. In the 100, driving east of Lownde's shaft, and worth ¾ ton per fathom, the lode we expect will further improve as it gets away from the influence of the cross-course. In the 90, driving east of Caro's shaft, the lode is disarranged and unproductive. Pepe's winze, sinking below the 50, and producing ¾ ton per fathom, is holed to the 60.—Los Salidos: In the 175, driving west of Taylor's engine-shaft, the lode worth 1 ton of lead ore per fathom, is very promising, and easy for driving through. The lode in the 160, driving west of Taylor's engine-shaft, is regular and well defined, producing ½ ton of ore per fathom. In the 175, driving east of Taylor's engine-shaft, there is a strong lode, spotted with ore. The 160, driving east of Taylor's engine-shaft, is temporarily suspended, while the men rise against Roberto's winze. The lode in the 145, driving east of Taylor's engine-shaft, worth 1 ton of ore per fathom, is large, open, and easy for driving. In the 130, driving in the same direction, the lode is disarranged and unproductive. The 120, driving east of Cox's shaft, continues to open up a splendid run of ore ground, worth 3 tons per fathom. The lode in the 110, driving east of San Miguel's shaft, and producing ½ ton of lead ore per fathom, has improved, and is of a promising appearance. In the 80, driving west of Palgrave's engine-shaft, the ground is hard, and the lode small and unproductive. There is no improvement in the 80, driving east of Palgrave's engine-shaft. In Roberto's winze, sinking below the 145, and worth 1½ ton per fathom, the water is strong, but the men are getting on very well with it. The weekly weighings of ore were continued very regularly during the past month, and the stopes are now without any alteration worthy of notice. The works at surface are going on very steadily, and the machinery is in good working condition. We estimate the raising for February at 300 tons.

[For remainder of Foreign Mines see to-day's Journal.]

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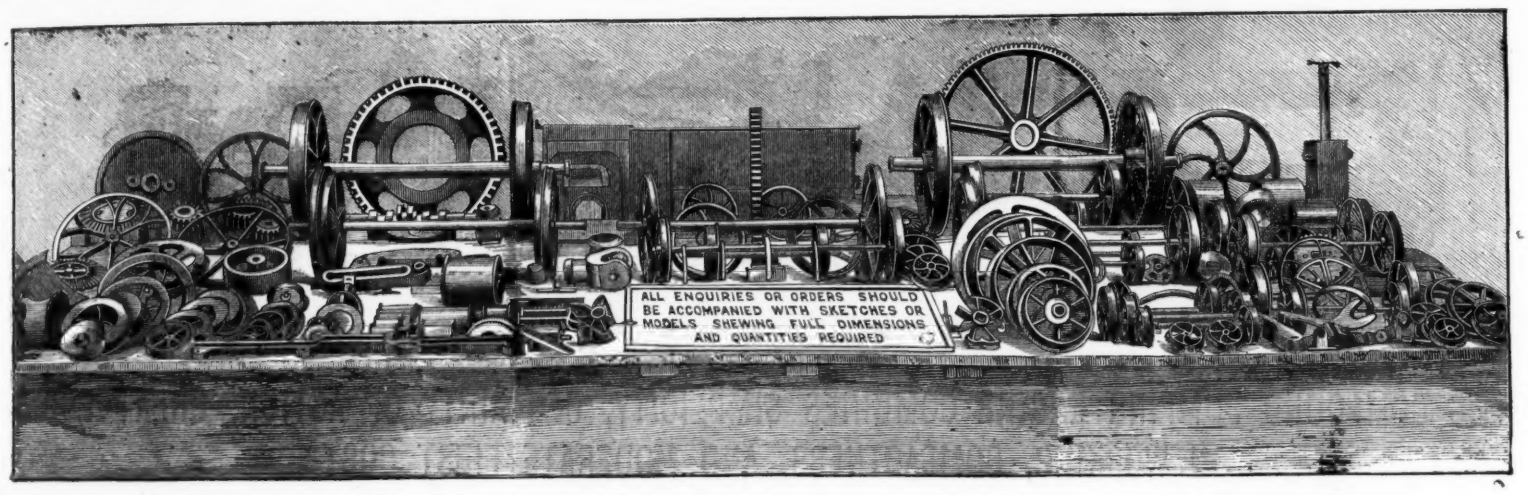
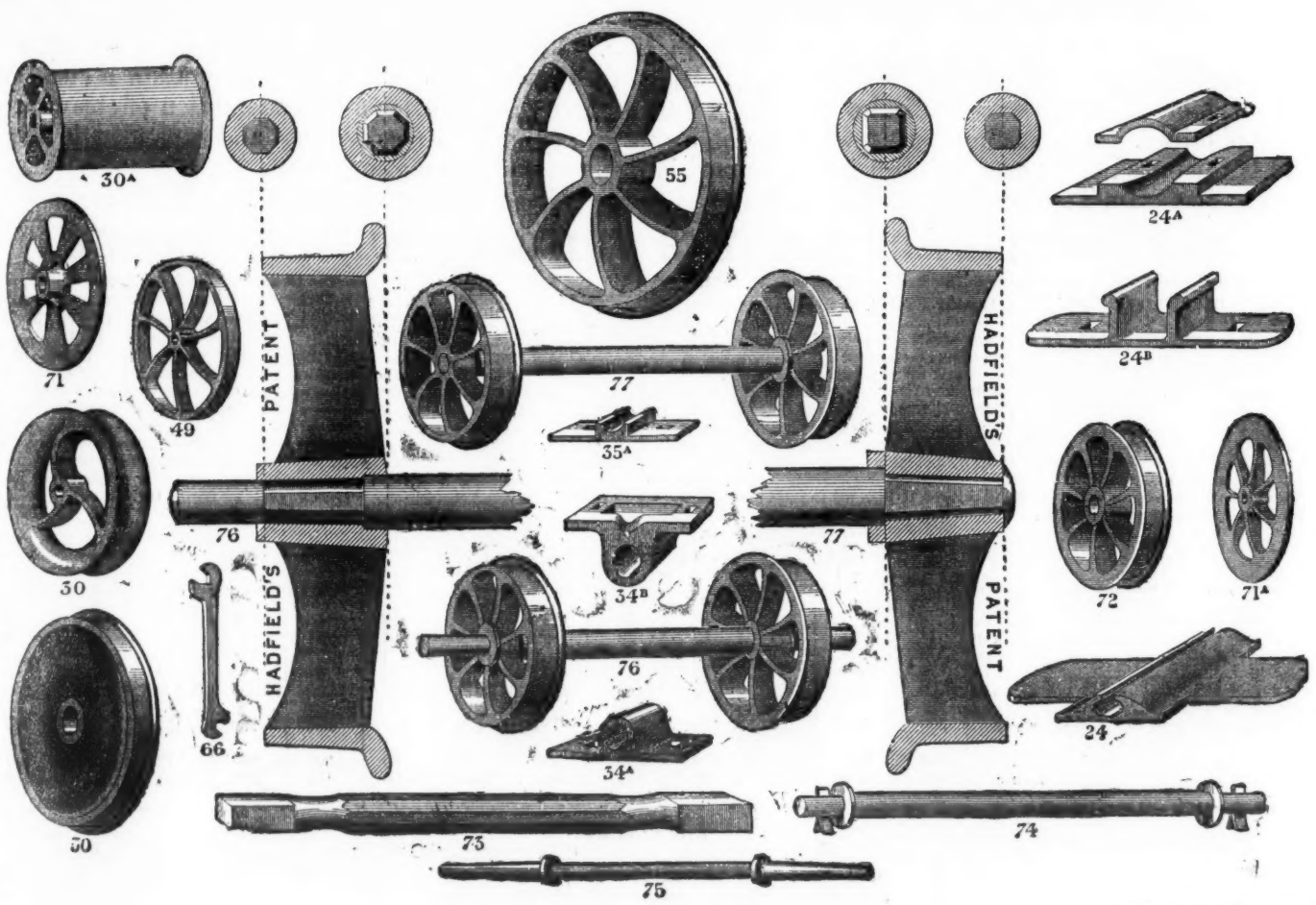


N.B.—Prices per Set of Wheels and Axles, fitted complete, forwarded on receipt of diameter of wheel on tread, depth of tread, real gauge, and thickness of axles and rolling load.



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The advantages of the above system are that the Wheels being forced upon a Taper Square-ended Axle, by Machinery, and then riveted (the machine securing truth), it is impossible that they can come loose or get within gauge. They are very cheaply fitted on, and run exceedingly true.

We construct the Arms of wheels upon the curved principle (as shown in the drawings above), consequently the shrinkage or cooling of the Castings is not interfered with, thus securing the greatest advantages of our very strong material.

CRUCIBLE CAST-STEEL WHEELS, when cast by us, are made from one-third to one-half lighter than Cast-Iron. They cannot be broken while working, even with rough usage, and will wear at least twelve times as long as Cast-Iron, thus saving animal and steam power, and reducing wear and tear immensely.

We would also draw special attention to our INCLINE PULLEYS and CAGE GUIDES, the adoption of which will prove highly advantageous.

MACHINE MOULDED STEEL GEAR WHEELS OF EVERY DESCRIPTION.

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